Subject Index 1986

Absorption
Solution of Hydrogen in Thin Palladium Films, 2175
Acenaphthylene
Effects of Pressure on the Photodimerization of Acenaphthylene in Micellar Systems, 1619
Acetaldehyde
Adsorption, Desorption and Surface Decomposition of Formaldehyde and Acetaldehyde on Metal Films Nickel, Palladium and Aluminium, 2221
Acetic Acid
Kinetic Investigation of the Oxidation of Bromide Ions by Cobalt(III). Part 2.—The Influence of Pyridine and Hydrocarbon on the Reaction in Acetic Acid Solvent, 1405
Infrared Study of the Adsorption of Carbon Monoxide, Carbon Dioxide, Acetic Acid and Acetic Anhydride on the Surface of Anhydrous Vanadyl Pyrophosphate, 3013
Acetic Anhydride
Infrared Study of the Adsorption of Carbon Monoxide, Carbon Dioxide, Acetic Acid and Acetic Anhydride on the Surface of Anhydrous Vanadyl Pyrophosphate, 3013
Acetonitrile
Electron Spin Resonance Evidence for the Structure of Ag^{II} and Ag^{O} Solvates in Acetonitrile, 2729
Molecular Complexes. Part 18.—A Nuclear Magnetic Resonance Adaptation of the Continuous Variation (Job) Method of Stoicheiometry Determination, 533
Acetylene
Adsorption and Decomposition of Ethylene and Acetylene on Flat Ru(001) and Stepped Ru(1,1,10) Surfaces, 3197
Acid–Base Equilibria
Acid–Base Equilibria in Polyelectrolyte Systems, 2353
Acid Strength
Estimation of Acidic and Physical Properties of Solid Acids Based on Adsorption of Basic Molecules in Non-polar Solvents, 1307
Acidity
Surface Acidity of some Re_2O_7-containing Metathesis Catalysts. An *in situ* Fourier-transform Infrared Study using Pyridine Adsorption, 2707
Acrylonitrile
Aqueous Latex Polymerization of Acrylonitrile. Kinetics, Particle Numbers and Particle Sizes, 943
Actinyl Ions
Standard Thermodynamic Functions of the Gaseous Actinyl Ions MO_2^{2+} and for their Hydration, 2873
Activation Parameters
Rates and Activation Parameters of Alkaline Hydrolysis of the 2-Carbomethoxypropionate Ion in Aqueous Mixtures of Dimethyl Sulphoxide, 1973
The Viscosity and Structure of Solutions. Part 3.—Interpretation of the Thermodynamic Activation Parameters for Propan-1-ol–Water–Electrolyte Systems, 2207
Activity Coefficients
Activity Coefficients in Mixed-electrolyte Solutions, 1
An Application of the Gibbs–Duhem Relation to the Binary Mixed Electrolytes, 69
Adsorption
Molecular Models for Adsorbed Monolayers at Charged Interfaces, 977
Thermodynamics of Adsorption from Binary Liquid Mixtures on Heterogeneous Adsorbents, 831
Adsorbed-phase Non-ideality for Adsorption of Binary Liquid Mixtures on Heterogeneous Adsorbants, 843
Effects of Different Surface Species on the Infrared Spectrum of CO adsorbed on RH/Al_2O_3, 883
Thermodynamics of Adsorption of *O*-n-Dodecylpentaethylene Glycol from Aqueous Solution on to Carbon and Silica at 313 K, 953
Estimation of Acidic and Physical Properties of Solid Acids Based on Adsorption of Basic Molecules in Non-polar Solvents, 1307
The Adsorption of Methanol on Hydrophilic, Hydrophobic and Mixed Silicas, 1351
Infrared Study of the Adsorption of Octadecylamine at the MgO/CCl_4 Interface. A Comparison with Investigations of the Adsorption of Octadecylamine on SiO_2 and Al_2O_3, 1527
Interlayer Adsorption of Ammonia and Pyridine in V_2O_5 Xerogel, 1597
Surface-charging Effects in the X-Ray Photoelectron Spectra of some Semiconducting Oxides, 1721
Adsorption of Phosphate on Calcite, 1733
Mixed Adsorption of a Non-ionic and an Anionic Surfactant at the Carbon–Aqueous Solution Interface, 1805
Mechanism of Permeation through Molecular-sieve Carbon Membrane. Part 1.—The Effect of Adsorption and the Dependence on Pressure, 2057
Isothermal and Non-isothermal Molecular Gas Transport in Model Non-homogeneous Porous Adsorbents, 2459
The Dubinin–Radushkevich–Kaganer Equation, 2473

Adsorption (*cont.*)
Adsorption of Organic Substances at the Mercury/Ethylene Glycol Interface. Part 2.—Aromatic Compounds, 2481
Thermal Desorption and Infrared Studies of Primary Aliphatic Amines adsorbed on Haematite (α-Fe_2O_3), 2505
On the Fundamental Concepts underlying Henry-law Adsorption and Adsorbed Gas Transport in Porous Solids, 2531
Thermodynamics of the Adsorption from Aqueous Alcohol Solutions by Graphitised Carbon (Graphon), 2605
A New Equation for the Retention of Solutes in Liquid–Solid Adsorption Chromatography with Mixed Mobile Phases, 2691
Infrared Study of Water and Pyridine Adsorption on the Surface of Anhydrous Vanadyl Pyrophosphate, 2773
Zeolites treated with Silicon Tetrachloride Vapour. Part 3.—Atom–Atom Potential Calculations for the Adsorption of Xenon, 2851
Adsorption and Decomposition of $Mo(CO)_6$ of Zeolite NaY, 2887
A Study of the Effects of Heat Treatment on the Physical Properties of the Carbon Black Vulcan 3, 2915
Infrared Study of the Adsorption of Carbon Monoxide, Carbon Dioxide, Acetic Acid and Acetic Anhydride on the Surface of Anhydrous Vanadyl Pyrophosphate, 3013
Coadsorption of Methanol and Carbon Dioxide on Alumina, 3019
Infrared Study of the Adsorption of But-1-ene, Buta-1,3-diene, Furan and Maleic Anhydride on the Surface of Anhydrous Vanadyl Pyrophosphate, 3033
^{13}C Nuclear Magnetic Resonance Investigations of Carbon Monoxide in Decationated Zeolites of Type Y, 3053
Adsorption and Decomposition of Ethylene and Acetylene on Flat Ru(001) and Stepped Ru(1,1,10) Surfaces, 3197
A Non-equilibrium Configuration Theory of Polyelectrolyte Adsorption, 3233
Normal Coordinate Analysis of Molecules adsorbed on Zeolite Surfaces. Part 1.—Cyclopropane adsorbed in Sodium Faujasites and Mordenites, 3401
The Relationship between Immersion Calorimetry and the Parameters of the Water Adsorption Isotherm on Active Carbons, 3439
CO Adsorption at 77 K on KCl Films. An Infrared Investigation, 3611
Determination of Isotherms and Initial Heat of Adsorption of CO_2 and N_2O in Four A Zeolites from Infrared Measurements, 365
Adsorption of ^4He on Spheron and Grafoil between 2 and 30 K, 483
Aerosol-OT
Interfacial Tension Minima in Oil–Water–Surfactant Systems. Effects of Alkane Chain Length and Presence of n-Alkanols in Systems containing Aerosol-OT, 1755
A Quasi-elastic Neutron Scattering Study of Water-in-oil Microemulsions stabilised by Aerosol-OT. Effect of Additives including Solubilised Protein on Molecular Motions, 2311
Small-angle Neutron Scattering Studies of Microemulsions Stabilised by Aerosol-OT. Part 3.—The Effect of Additives on Phase Stability and Droplet Structure, 2411
Alcohols
Thermodynamic Properties of Binary Alcohol–Hydrocarbon Systems, 2435
Aliphatic Amines
Thermal Desorption and Infrared Studies of Primary Aliphatic Amines adsorbed on Haematite (α-Fe_2O_3), 2505
Alkali Metals
The Viscosity and Structure of Solutions. Part 2.—Measurement of the *B* Coefficient of Viscosity for Alkali-metal Chlorides in Propan-1-ol–Water Mixtures at 25 and 35 °C, 2195
Metal Particles supported by Porous Glass, 2515
Alkali-metal Cryptates in Nitromethane. Thermodynamic Parameters for Complex Formation and for Transfer among Different Solvents, 349
Alkalinity
Effect of Alkalinity on the Crystallisation of Silicalite-1 Precursors, 785
Alkanes
Homologation of Small Alkanes on Pt, Pd and Ni Catalysts. Contribution of Intermediate Carbenes to Skeletal Isomerization, 103
Mechanism of n-Alkane Transformations over a Solid Superacid of Lewis Character, $Al_2O_3/AlCl_3$, 1687
Hydrogenolysis of Alkanes. Part 3.—Hydrogenolysis of n-Hexane and Methylcyclopentane over variously treated Ru/TiO_2 Catalysts, 1985
Interfacial Tension Minima in Oil–Water–Surfactant Systems. Systems containing Pure Non-ionic Surfactants, Alkanes and Inorganic Salts, 2951
Alkanolamines
Intramolecular Hydrogen Bonding and Conformational Behaviour of *N*-Methyldiethanolamine and Triethanolamine, 681
Alkenes
Formation of an Epoxide Intermediate in the Photo-oxidation of Alkenes over Silica-supported Vanadium Oxide, 35
Alkoxycyanobiphenyls
Optical Anisotropies of Alkylcyanobiphenyls, Alkoxycyanobiphenyls and Related Compounds, 3381
***m*-Alkoxyphenols**
Microcalorimetric Measurement of the Enthalpies of Transfer of a Series of *m*-Alkoxyphenols from Isotonic Aqueous Solution to *Escherichia coli* Cells, 2929

Alkylammonium Cations
Ion Recognition by Macrocyclic Hosts, 1145
Alkylcyanobicyclohexyls
Optical Anisotropies of Alkylcyanobicyclohexyls and Related Compounds, 3367
Alkylcyanobiphenyls
Optical Anisotropies of Alkylcyanobiphenyls, Alkoxycyanobiphenyls and Related Compounds, 3381
Alkylphenothiazinesulphate Micelles
Studies of Alkylphenothiazinesulphonate Micellar Assemblies in Aqueous Solution, 2615
Alumina
Chlorinated Alumina. Acidic Properties and Catalytic Activity towards n-Butane Isomerization, 1893
$Re_2O_7/Al_2O_3 \cdot B_2O_3$ Metathesis Catalysts, 1945
Behaviour of Dinitrogen Species adsorbed on a Co/Al_2O_3 Catalyst with or without Coadsorbed Hydrogen studied by Infrared Spectroscopy, 2269
Coadsorption of Methanol and Carbon Dioxide on Alumina, 3019
Reactions of Hydrocarbons on Alumina-supported Pt–Ir Bimetallic Catalysts. Part 1.—Exchange of Methane and Cyclopentane with Deuterium, and Hydrogenolysis of Butane, Pentane and Cyclopentane, 3113
Reactions of Hydrocarbons on Alumina-supported Pt–Ir Bimetallic Catalysts. Part 2.—Exchange of Benzene with Deuterium, and Exchange and Hydrogenolysis of 2,2-Dimethylpropane, 3125
Thermal Desorption and Infrared Studies of Butylamine adsorbed on SiO_2, Al_2O_3 and CaO, 3391
Physicochemical Properties and Isomerization Activity of Chlorinated Pt/Al_2O_3 Catalysts, 3667
Effect of Temperature on the Point of Zero Charge and Surface Dissociation Constants of Aqueous Suspensions of γ-Al_2O_3, 3697
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 1.—Air and Vacuum Dehydrations of $H_3[PMo_{12}O_{40}] \cdot xH_2O$ and $H_4[SiMo_{12}O_{40}] \cdot xH_2O$, 263
Paramagnetic Metal and Oxygen Species observed with Rh/γ-Al_2O_3 and Rh/ZrO_2. Dependence on the Decarbonylation Temperature of $[Rh_4(CO)_{12}]$ on Alumina and Zirconia Supports, 1795
Aluminium
A High-molecular Solid-state Nuclear Magnetic Resonance Study of the Ordering of Silicon and Aluminium in Synthetic Mazzite (Zeolite Omega), 569
Amides
Radiation Generation of Radical Cations of Amides. An Electron Spin Resonance Study, 2833
Amine
Crystallisation of Silicate-1 Precursors in the Amine–$(C_5H_{7/4}NBr$–SiO_2–H_2O System, 801
Amino Acids
Potentiometric Monitoring of Proteins. Part 3.—Direct Potentiometry with a Copper Electrode, 1223
Aqueous Solutions containing Amino Acids and Peptides. Part 24.—Free Energetic and Enthalpic Coefficients for the Interactions of some Prolyl and Sarcosyl Terminally Substituted Compounds at 25 °C, 2965
Amino Alcohols
Intramolecular Hydrogen Bonding and Intermolecular Association of Amino Alcohols, 691
Ammonia
Interlayer Adsorption of Ammonia and Pyridine in V_2O_5 Xerogel, 1597
Superacid Sites in Zeolite H-Mordenite, 2151
Amorphous Alloys
Catalysis by Amorphous Metal Alloys. Part 4.—Structural Modification towards Metastable States and Catalytic Activity of Amorphous $Ni_{62}B_{38}$ Ribbon Alloy, 1771
Anion-selective Electrodes
Design of Anion-selective Membranes for Clinically Relevant Sensors, 1179
Anion Solvation
Characterization of Anion Solvation in *N*-Methylacetamide Transfer Enthalpies of Anions and the Reaction Rates of Ethyl Iodide with Bromide Ion in *N*-Methylacetamide–Acetonitrile and *N*-Methylacetamide–*N*,*N*-Dimethylacetamide Mixtures, 2141
Characterization of Anion Solvation in *N*-Methylacetamide Transfer Enthalpies of Anions and the Reaction Rates of Ethyl Iodide with Bromide Ion in *N*-Methylacetamide–Acetonitrile and *N*-Methylacetamide–*N*,*N*-Dimethylacetamide Mixtures, 2141
Anodic Detection
Anodic Detection in Flow-through Cells, 1081
Antimony Oxide
Studies of Propene Oxidation over Mixed Uranium–Antimony Oxides, 3587
Aqueous Electrolytes
Polyaniline, a Novel Conducting Polymer. Morphology and Chemistry of its Oxidation and Reduction in Aqueous Electrolytes, 2385
Solvent Structural Constant and Solvation Behaviour Applied to the Description of Aqueous Electrolytes at 25–300 °C, 2283
Aqueous Solutions
Application of a Solvent-coupled Model to a Calculation of Partial Molar Isobaric Heat Capacities of Neutral and Ionic Solutes in Aqueous Solution. Estimates of Isobaric Heat Capacities of Activation, 2989
The Viscosity and Structure of Solutions. Part 1.—A New Theory of the Jones–Dole *B*-Coefficient and the Related Activation Parameters: Application to Aqueous Solutions, 563
Aquocobalamin Chloride
Solvent Effects on the Thermodynamics of Aquocobalamin Chloride and Model Compounds in Dioxane–Water Mixtures, 3331

Carbon Monoxide (*cont.*)
Non-steady-state and Transient Effects in Medium-pressure Hydrogenation of Carbon Monoxide over Rhodium Catalysts, 431
Carboxylic Acids
Hydrogen Bonding. Part 1.—Equilibrium Constants and Enthalpies of Complexation for Monomeric Carboxylic Acids with *N*-Methylpyrrolidinone in 1,1,1-Trichloroethane, 3501
Catalase
^1H and ^{19}F Nuclear Magnetic Resonance Investigation of the Active Site of Catalase, 2079
Catalysis
Activity and Selectivity in Catalytic Reactions of Buta-1,3-diene and But-1-ene on Supported Vanadium Oxides, 13
Formation of an Epoxide Intermediate in the Photo-oxidation of Alkenes over Silica-supported Vanadium Oxide, 35
The Support Effect of CuO Catalyst for the Reduction of Nitric Oxide with Hydrogen or Ammonia, 61
Homologation of Small Alkanes on Pt, Pd and Ni Catalysts. Contribution of Intermediate Carbenes to Skeletal Isomerization, 103
Chemisorption and Catalysis by Metal Clusters: Characterisation and Chemisorption. Properties of $Ru_3(CO)_{12}$ and $H_4RU_4(CO)_{12}$ Supported on Alumina, Silica and Titania, 189
Photocatalytic Dehydrogenation of Liquid Propan-2-ol by TiO_2. Part 1.—Kinetics, 607
Catalysis by Amorphous Metal Alloys. Part 3.—Catalytic Activity of Raney Copper Catalysts Prepared from Amorphous $Cu_{62}Zr_{38}$ Powder, 707
Electron Spin Resonance Study of the Radicals formed by Ultraviolet Irradiation of TiO_2 in the Presence of Sulphur Dioxide and Oxygen, 739
Surface Reduction in Low-temperature Formation of Nickel Oxide from Different Nickel Salts. Thermal Analysis, Surface Area, Electron Microscopy and Infrared Studies, 747
Activity Measurements and Spectroscopic Studies of the Catalytic Oxidation of Toluene over V_2O_5/Al_2O_3-C Catalysis, 767
Kinetics and Mechanism of the Cobalt-catalysed Reaction of Oxygen and Sulphite at Very Low Concentrations, 869
Regeneration of Pentasil Zeolite Catalysts using Ozone and Oxygen, 1007
Catalytic Properties of Magnesium Oxides Doped with Sodium Compounds, 1357
The Oxidation of Carbon Monoxide on a Platinum Catalyst at Atmosphere Pressure, 1389
Structural Relationships in the Reduction of the Vanadia–Molybdena Intermediate Compound, 1673
Mechanism of n-Alkane Transformations over a Solid Superacid of Lewis Character, $Al_2O_3/AlCl_3$, 1687
An Electron Spin Resonance Study on the Re/ZrO_2 System, 1713
Catalysis by Amorphous Metal Alloys. Part 4.—Structural Modification towards Metastable States and Catalytic Activity of Amorphous $Ni_{62}B_{38}$ Ribbon Alloy, 1771
Chlorinated Alumina. Acidic Properties and Catalytic Activity towards n-Butane Isomerization, 1893
Catalytic Reactions on Metal-supported Semiconductors. Oxidation of CO over ZnO Films on Silver, 2025
Application of Infrared Spectroscopy to the Measurement of Surface and Bulk Oxidation/Reduction States of MoO_3, 2155
Catalysis by Colloidal Gold of the Reactions between Ferricyanide and Thiosulphate Ions, 2277
Correlation between Hydrodesulphurization Activity and Reducibility of Unsupported MoS_2-based Catalysts promoted by Group VIII Metals, 2423
Metal Particles supported by Porous Glass, 2515
Catalytic Decomposition of Isopropanol over Chromite Spinels MCr_2O_4 (M = Ni, Mn and Mg), 2665
Surface Acidity of some Re_2O_7-containing Metathesis Catalysts. An *in situ* Fourier transform Infrared Study using Pyridine Adsorption, 2707
Chemisorption and Catalysis by Metal Clusters. Hydrogenation of Ethene and Hydrogenolysis of Ethane catalysed by Supported Ruthenium Clusters derived from $Ru_3(CO)_{12}$ and from $H_4Ru_4(CO)_{12}$, 2719
The Effect of Acid Treatment on the Properties of Dealuminated Y Zeolite, 2817
Cooperative Effects in Heterogeneous Catalysis. Part 1.—Phenomenology of the Dynamics of Carbon Monoxide Oxidation on Palladium embedded in a Zeolite Matrix, 3315
Catalytic Ignition on PdAu Wires, 3475
Adsorption and Desorption Kinetics of Oxygen on Tin–Antimony Oxide Catalyst by Quasi-constant Coverage Methods, 3601
Adsorption and Reduction of Nitrogen Monoxide by Potassium-doped Carbon, 3657
Physicochemical Properties and Isomerization Activity of Chlorinated Pt/Al_2O_3 Catalysts, 3667
Effect of Temperature on the Point of Zero Charge and Surface Dissociation Constants of Aqueous Suspensions of γ-Al_2O_3, 3697
Non-steady-state and Transient Effects in Medium-pressure Hydrogenation of Carbon Monoxide over Rhodium Catalysts, 431
A Single-turnover (STO) Study of the Effect of Heat on Catalyst Activity, 3025
Infrared Studies of Probe Molecules adsorbed on Calcium Oxide, 1911
Cellulose
The Effect of Tannic Acid on the Electrical Properties of the Interface and the Non-linear Streaming Potential of Cellulose in a Cationic Dye Solution, 329
Cerussite
Spectroscopic Investigation of Sulphidation of Zinc and Lead Carbonates, 2043

Chain Conformations
A Comparison of the Conformation of Micellar and Non-micellar Sodium Octanoate and Octanoic Acid using ^{13}C–^{1}H and ^{1}H–^{1}H Vicinal Spin–Spin Coupling Constants, 255
Charge Transfer
Protonation of the Dianion of Tetraphenylethylene by Alcohols and Water in Acetonitrile. Case of Mixed First-order and Second-order Kinetics in the Proton Donor, 1885
Chemical Relaxation
Chemical Relaxation in Mixed Micellar Solutions containing Surface-active Drugs and Hexadecyltrimethylammonium Bromide Micelles, 2497
Chemiluminescence
The Reaction of Ferrimyoglobin with Methylhydroperoxide, 2133
Chemisorption
Chemisorption and Catalysis by Metal Clusters: Characterisation and Chemisorption. Properties of $Ru_3(CO)_{12}$ and $H_4RU_4(CO)_{12}$ Supported on Alumina, Silica and Titania, 189
Chemisorptive Replacement of Surface Oxygen by Hydrogen Halides (HCl and HBr) at Pb(110) Surfaces. Photoelectron Spectroscopic and Kinetic Evidence for a Metastable Chloride Overlayer, 723
Chemisorption and Catalysis by Metal Clusters. Hydrogenation of Ethene and Hydrogenolysis of Ethane catalysed by Supported Ruthenium Clusters derived from $Ru_3(CO)_{12}$ and from $H_4Ru_4(CO)_{12}$, 2719
Chlorine
The Electrical Conductivity of Carbon-fibre Adsorbents. An Attempt to Discriminate between Chemisorption and Physisorption of Chlorine, 2627
Chromatography
A New Equation for the Retention of Solutes in Liquid–Solid Adsorption Chromatography with Mixed Mobile Phases, 2691
Concentration Effects in Exclusion Chromatography. Quantitative Prediction in θ-Polymeric Systems, 2781
Chromite Spinels
Catalytic Decomposition of Isopropanol over Chromite Spinels MCr_2O_4 (M = Ni, Mn and Mg), 2665
Chromium(III)
Kinetics of Metal Oxide Dissolution. Oxidative Dissolution of Chromium(III) Oxide by Potassium Permanganate, 3245
Circular Dichroism
The Metachromism of Methyl Orange with Electrolytes and Possible Salting-out, 119
Clays
Structural Aspects of Metal-oxide-pillared Sheet Silicates. An Investigation by Magic-angle-spinning Nuclear Magnetic Resonance, Fourier-transform Infrared Spectroscopy and Powder X-Ray Diffractometry, 3081
Spectroscopy of Proflavine adsorbed on Clays, 281
Characterization of Clays and Clay–Organic Systems. Cation Diffusion and Dehydroxylation, 545
Clinical Sensors
Design of Anion-selective Membranes for Clinically Relevant Sensors, 1179
Coated Wire Electrodes
Coated Wire Ion-selective Electrodes. Principles and Practice, 1217
Cobalt
Kinetics and Mechanism of the Cobalt-catalysed Reaction of Oxygen and Sulphite at Very Low Concentrations, 869
Behaviour of Dinitrogen Species adsorbed on a Co/Al_2O_3 Catalyst with or without Coadsorbed Hydrogen studied by Infrared Spectroscopy, 2269
Effect of Support and Promoter on the Coadsorption of Carbon Monoxide and Hydrogen on Fischer–Tropsch Cobalt Catalysts, 2635
Kinetics of the Solvolysis of the *cis*-Chlorothiocyanatobis(1,2-diaminoethane) cobalt(III) Ion in Water–t-Butyl Alcohol Mixtures, 1643
Kinetic Investigation of the Oxidation of Bromide Ions by Cobalt(III). Part 2.—The Influence of Pyridine and Hydrocarbon on the Reaction in Acetic Acid Solvent, 1405
Ionization Equilibria of Cobalt(II) Chloride in *N*,*N*-Dimethylformamide, 1703
Association of $Co(sep)^{3+}$ Ions with $S_2O_3^{2-}$ Ions. Spectrophotometric, Circular Dichroism and Solubility Measurements, 1429
Dissolution of Cobalt Ferrites by Thioglycolic Acid, 2345
Collagen
Electron Migration in Hydrated DNA and Collagen at Low Temperatures. Part 1.—Effect of Water Concentration, 2933
Electron Migration in Hydrated DNA and Collagen at Low Temperatures. Part 2.—The Effect of Additives, 2945
Colloids
Fourier-transform Infrared Spectroscopy of Colloidal α-, β- and γ-Ferric Oxide Hydroxides, 2401
Specific Quenching of the Photoexcited State of Tris(2,2′-bipyridine)ruthenium(II) by Colloidal Prussian Blue, 1637
Water Spin Relaxation in Colloidal Systems. Part 1.—^{17}O and ^{2}H Relaxation in Dispersions of Colloidal Silica, 387
Water Spin Relaxation in Colloidal Systems. Part 2.—^{17}O and ^{2}H Relaxation in Protein Solutions, 401
Water Spin Relaxation in Colloidal Systems. Part 3.—Interpretation of the Low-frequency Dispersion, 415
Combustion
Arrhenius Parameters for the Reaction $HO_2 + C_2H_4 \rightarrow C_2H_5 + H_2O_2$ over the Temperature Range 400–500 °C, 89

Complex Formation
Spectrophotometric and Calorimetric Study of the Gallium(III) Monothiocyanate Complex in Dimethyl Sulphoxide Solutions, 1381
Ionization Equilibria of Cobalt(II) Chloride in *N*,*N*-Dimethylformamide, 1703
Diffusion Phenomena and Metal Complex Formation Equilibria. Part 1.—Cd^{II}–Thiourea Systems in Aqueous and Mixed-solvent Media, 3415
Molecular Complexes. Part 18.—A Nuclear Magnetic Resonance Adaptation of the Continuous Variation (Job) Method of Stoicheiometry Determination, 533
Conductance Measurements
Protonic and Ionic Conduction in Lysozyme. Hydration and Field-dependent Effects, 143
Conductivity
The Electrical Conductivity of Carbon-fibre Adsorbents. An Attempt to Discriminate between Chemisorption and Physisorption of Chlorine, 2627
Conductivity of Unsymmetrical and Mixed Electrolytes. Dilute Aqueous Cadmium Chloride and Barium Chloride–Hydrochloric Acid Mixtures at 298.15 K, 2755
Transport Numbers of Dilute Aqueous Cadmium Chloride Solutions at 298.15 K, 2763
Exchange of Metal Atoms in Solid Mixed-valence $Tl^{I}_{2}Tl^{III}Cl_{6}$. Conductivity and Positron Annihilation Investigations, 2825
Electron Migration in Hydrated DNA and Collagen at Low Temperatures. Part 1.—Effect of Water Concentration, 2933
Electron Migration in Hydrated DNA and Collagen at Low Temperatures. Part 2.—The Effect of Additives, 2945
The Electrical Conductance of Molten Lead(II) 9,10-Dihydroxyoctadecanoate and some Binary Mixtures with Lead(II) Octadecanoate, 3357
Surface-charging Effects in the X-Ray Photoelectron Spectra of some Semiconducting Oxides, 1721
Configuration Theory
A Non-equilibrium Configuration Theory of Polyelectrolyte Adsorption, 3233
Copper
Catalysis by Amorphous Metal Alloys. Part 3.—Catalytic Activity of Raney Copper Catalysts Prepared from Amorphous $Cu_{62}Zr_{38}$ Powder, 707
Metal–Ligand Complex Formation in the Presence of Ionic Micelles. Equilibrium and Kinetics of the Reaction between Cupric Ion and Benzoylacetone in the Presence of Ionic Micelles of SDS or DTAC1, 1515
Gibbs (Free) Energies of Transfer of Silver(I), Copper(I) and Potassium(I), 1955
Electron Spectroscopic Studies of Formic Acid Absorption and Oxidation on Cu and Ag dosed with Barium, 1657
The Support Effect of CuO Catalyst for the Reduction of Nitric Oxide with Hydrogen or Ammonia, 61
Redox Behaviour of Binuclear Copper(II) Oxide Supported on Silica, 1553
Cosolute Solubility
The Interaction of Aromatic Compounds with Poly(vinylpyrrolidone) in Aqueous Solution. Part 5.—Binding Isotherms for Phenols and *O*-Substituted Phenols, 291
Crown Ether
New Host–Guest Carriers, 1161
Ion Recognition by Macrocyclic Hosts, 1145
Cryptand 222
A Nuclear Magnetic Resonance Study of the Sodium Cryptate formed by 4,7,13,18-Tetraoxa-1,10-diazabicyclo[8.5.5]eicosane (C211) in Various Solvents, 1999
Free-energy Parameters for the Complexation of Metal Ions and Cryptand 222 in Propan-1-ol and for the Transfer and Partition of Cryptand 222 in Water–Alcohol Systems, 2811
Thermodynamic Parameters of Electrolyte Solutions in Nitromethane, 3275
Alkali-metal Cryptates in Nitromethane. Thermodynamic Parameters for Complex Formation and for Transfer among Different Solvents, 349
Cumene
Catalytic Properties of Magnesium Oxides Doped with Sodium Compounds, 1357
Cyanide
Fourier Transform Infrared Studies of the Irreversible Oxidation of Cyanide at Platinum Electrodes, 3525
Cyclic Voltammetry
Electrode Kinetics of the Cd^{II}/Cd–Hg System in Ethylene Glycol–Water Mixtures, 1781
Gibbs (Free) Energies of Transfer of Silver(I), Copper(I) and Potassium(I), 1955
Electrochemical Reduction of 2-Cyclohexen-1-ones in a Hydroethanolic Medium, 495
Cyclodextrin
Mechanism of Inclusion-compound Formation for Binding of Organic Dyes, Ions and Surfactants to α-Cyclodextrin Studied by Kinetic Methods Based on Competition Experiments, 1271
Thermodynamics of Formation of Inclusion Compounds in Water. α-Cyclodextrin–Alcohol Adducts at 298.15 K, 2089
Kinetic and Equilibrium Studies associated with the Formation of Inclusion Compounds involving n-Butanol and n-Pentanol in Aqueous Cyclodextrin Solutions, 2111
A Kinetic and Equilibrium Study of the Inclusion of Pyronine B by β- and γ-Cyclodextrin, 2123
Complexation of Roccellin by β- and γ-Cyclodextrin, 2333
Cyclohexane
Thermodynamics of Three Toluene-containing Mixtures Generalized van der Waals and Ising-like Models, 1839
Cyclohexanone
Electrochemical Reduction of 2-Cyclohexen-1-ones in a Hydroethanolic Medium, 495

Cyclopropane
Normal Coordinate Analysis of Molecules adsorbed on Zeolite Surfaces. Part 1.—Cyclopropane adsorbed in Sodium Faujasites and Mordenites, 3401
Dabsyl Aspartate
Surface-enhanced Raman Scattering (SERS) Enhancements and Excitation Profiles for 3,5-Pyridinedicarboxylate and Dabsyl Aspartate on Colloidal Gold, 851
Dealumination
Zeolites treated with Silicon Tetrachloride Vapour. Part 2.—Sorption Studies, 3569
Decarbonylation
Paramagnetic Metal and Oxygen Species observed with $Rh/\gamma\text{-}Al_2O_3$ and Rh/ZrO_2. Dependence on the Decarbonylation Temperature of $[Rh_4(CO)_{12}]$ on Alumina and Zirconia Supports, 1795
Dehydration
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 3.—The Stability of Unsupported $H_{3+n}(PV_nMo_{12-n}O_{40})\cdot xH_2O$ in Air and in a Vacuum, 3479
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 1.—Air and Vacuum Dehydrations of $H_3[PMo_{12}O_{40}]\cdot xH_2O$ and $H_4[SiMo_{12}O_{40}]\cdot xH_2O$, 263
Dehydrogenation
Photocatalytic Dehydrogenation of Liquid Propan-2-ol by TiO_2. Part 2.—Mechanism, 2747
Density
The Volumetric Behaviour of Poly(vinyl alcohol) in Aqueous Solution, 2791
Viscosity of Na_2SO_4 and $MgSO_4$ Solutions in Ethanol–Water Mixtures at 15, 25 and 35 °C, 3307
Derjaguin Approximation
The Accuracy of the Derjaguin Approximation for the Electrostatic Double-layer Interaction between Curved Surfaces bearing Constant Potentials, 2801
Deuterium Exchange
Deuterium Longitudinal Nuclear Magnetic Relaxation of Heavy Water in Alkylammonium Chloride Solution. Effect of Deuterium Exchanges between Water and Polar Heads, 2185
Dialkyl Carbonates
Radical Cations of Organic Carbonates, Trimethyl Borate and Methyl Nitrate. A Radiation–Electron Spin Resonance Study, 2367
Diborane
Modification of H-Mordenite with Silane and Diborane. A Comparative Study of the Reaction Parameters, 963
Dichloroethanes
Reactions of Recoil ^{38}Cl Atoms with Dichloroethanes, 3003
Dielectric Properties
The Utilization of Time-resolved Dielectric Loss to probe the Role of the Surface in Heterogeneous Photochemistry, 3625
Protonic and Ionic Conduction in Lysozyme. Hydration and Field-dependent Effects, 143
The Dielectric Properties of Zeolites in Variable Temperature and Humidity, 3535
The Time-domain Response of Humid Zeolites, 3553
Diffusion
Multicomponent Diffusion of Double Salts. Sodium Hydrogen Sulphate in Aqueous Solution, 247
Electrode Kinetics of the Cd^{II}/Cd–Hg System in Ethylene Glycol–Water Mixtures, 1781
Isothermal and Non-isothermal Molecular Gas Transport in Model Non-homogeneous Porous Adsorbents, 2459
Stochastic Models of Multi-species Kinetics in Radiation-induced Spurs, 2673
Osmosis and Reverse Osmosis. Part 2.—The Separation Factor of Reverse Osmosis and its Connection with Isotonic Osmosis, 3293
Diffusion Phenomena and Metal Complex Formation Equilibria. Part 1.—Cd^{II}–Thiourea Systems in Aqueous and Mixed-solvent Media, 3415
Dimethyl Sulphoxide
Spectrophotometric and Calorimetric Study of the Gallium(III) Monothiocyanate Complex in Dimethyl Sulphoxide Solutions, 1381
***N,N*-Dimethylformamide**
Cross Enthalpic Pair Interaction Coefficients with Water in *N,N*-Dimethylformamide and with *N,N*-Dimethylformamide in Water, 53
Ionization Equilibria of Cobalt(II) Chloride in *N,N*-Dimethylformamide, 1703
Stability of Monochloride Complexes of some Divalent Transition-metal Cations in *N,N*-Dimethylformamide, 1745
Dissolution
Comparative Dissolution Rates of Defective Nickel Oxides from Different Sources, 759
DNA
Electron Migration in Hydrated DNA and Collagen at Low Temperatures. Part 1.—Effect of Water Concentration, 2933
Electron Migration in Hydrated DNA and Collagen at Low Temperatures. Part 2.—The Effect of Additives, 2945
n-Dodecane
Inhibition of the Thin-film Oxidation of n-Dodecane by *p*-Methoxyphenol, 1965
Double-layer Interaction
The Accuracy of the Derjaguin Approximation for the Electrostatic Double-layer Interaction between Curved Surfaces bearing Constant Potentials, 2801
Direct Measurement of Temperature-dependent Interactions between Non-ionic Surfactant Layers, 2735
Double Salts
Multicomponent Diffusion of Double Salts. Sodium Hydrogen Sulphate in Aqueous Solution, 247

Droplets
General Formulae for the Curvature Dependence of Droplets and Bubbles, 1413
Drugs
Chemical Relaxation in Mixed Micellar Solutions containing Surface-active Drugs and Hexadecyltrimethylammonium Bromide Micelles, 2497
Dubinin–Radushkevich–Kaganer Equation
The Dubinin–Radushkevich–Kaganer Equation, 2473
Dyes
Aggregation in Aqueous Solution of the Dye Pyronine G, 157
Emission Characteristics and Micellization of Cationic 1,4-Bis(β-pyridyl-2-vinyl)benzene Laser Dye, 909
The Effect of Tannic Acid on the Electrical Properties of the Interface and the Non-linear Streaming Potential of Cellulose in a Cationic Dye Solution, 329
Egg-yolk Lecithin
Kinetics of $O_2(^1\Delta_g)$ Photo-oxidation Reactions in Egg-yolk Lecithin Vesicles, 1627
Electrochemistry
Anodic Detection in Flow-through Cells, 1081
Anodic Detection in Flow-through Cells, 1081
Chemically Modified Electrodes for the Electrocatalytic Oxidation of Nicotinamide Coenzymes, 1245
The Effect of Heat Treatment on Group VIIIB Porphyrins as Electrocatalysts in the Cathodic Reduction of Oxygen, 1561
The Electrochemical Reduction of Polyacetylene with Selected Reducing Agents, 2323
Electrochemical Sensors: Theory and Experiment, 1033
Application of Microelectrodes to the Study of the Li|Li^+ Couple in Ether Solvents. Part 2.—Temperature Dependence, 179
Effect of Light upon Electroreduction of 4,4′-Bipyridyl and Methyl Viologen in Aqueous Solutions, 585
Amperometric Enzyme Electrodes, 1237
Protonation of the Dianion of Tetraphenylethylene by Alcohols and Water in Acetonitrile. Case of Mixed First-order and Second-order Kinetics in the Proton Donor, 1885
Adsorption of Organic Substances at the Mercury/Ethylene Glycol Interface. Part 2.—Aromatic Compounds, 2481
The Hydrogen Evolution Reaction under Mixed Kinetic Control, 3343
Electrochemistry and Stability Studies of Oxo-bridged Dinuclear Ruthenium(III) Complexes for Water Oxidation, 3515
Fourier Transform Infrared Studies of the Irreversible Oxidation of Cyanide at Platinum Electrodes, 3525
Potentials of Ion-exchanged Synthetic Zeolite–Polymer Membranes, 3647
Electrochemical Reduction of 2-Cyclohexen-1-ones in a Hydroethanolic Medium, 495
Anodic Detection in Flow-through Cells, 1081
Electrode Kinetics of the Cd^{II}/Cd–Hg System in Ethylene Glycol–Water Mixtures, 1781
The Effect of Tannic Acid on the Electrical Properties of the Interface and the Non-linear Streaming Potential of Cellulose in a Cationic Dye Solution, 329
Electrolyte Solutions
Osmotic Coefficients of Aqueous NaCl and KCl Solutions. Temperature–Concentration Behaviour of the Bahe Lattice Model, 2167
Conductivity of Unsymmetrical and Mixed Electrolytes. Dilute Aqueous Cadmium Chloride and Barium Chloride–Hydrochloric Acid Mixtures at 298.15 K, 2755
Transport Numbers of Dilute Aqueous Cadmium Chloride Solutions at 298.15 K, 2763
Activity Coefficients in Mixed-electrolyte Solutions, 1
An Application of the Gibbs–Duhem Relation to the Binary Mixed Electrolytes, 69
Cluster Theory Applied to Aqueous (2:2) Electrolytes over a Wide Concentration Range. Osmotic Coefficients Association and Redissociation, 921
Electron Microscopy
Electron Microscopy of Pt, Pd and Ni Particles in a NaX Zeolite Matrix, 205
Surface Reduction in Low-temperature Formation of Nickel Oxide from Different Nickel Salts. Thermal Analysis, Surface Area, Electron Microscopy and Infrared Studies, 747
Electron-microscopic Observation of Photodeposited Pt on TiO_2 Particles in Relation to Photocatalytic Activity, 527
Electron Migration
Electron Migration in Hydrated DNA and Collagen at Low Temperatures. Part 1.—Effect of Water Concentration, 2933
Electron Migration in Hydrated DNA and Collagen at Low Temperatures. Part 2.—The Effect of Additives, 2945
Electron Spectroscopy
Electron Spectroscopic Studies of Formic Acid Absorption and Oxidation on Cu and Ag dosed with Barium, 1657
Electron Spin–Echo Spectroscopy
Influence of Cocations on the Location and Coordination Geometry of Cu^{2+} in M^+A Zeolites (M^+ = Na, K, Tl, Rb, Cs, NH_4 and CH_3NH_3). An Electron Spin Resonance and Electron Spin–Echo Modulation Spectroscopic Study, 213
Electron Spin Resonance Spectroscopy
The Support Effect of CuO Catalyst for the Reduction of Nitric Oxide with Hydrogen or Ammonia, 61
Radical Cations of Ethylene Oxide and other Oxiranes prepared by Exposure to Ionizing Radiation. An Electron Spin Resonance Study, 167
Influence of Cocations on the Location and Coordination Geometry of Cu^{2+} in M^+A Zeolites (M^+ = Na, K, Tl, Rb, Cs, NH_4 and CH_3NH_3). An Electron Spin Resonance and Electron Spin–Echo Modulation Spectroscopic Study, 213

Electron Spin Resonance Spectroscopy (*cont.*)
Electron Spin Resonance Study of the Radicals formed by Ultraviolet Irradiation of TiO_2 in the Presence of Sulphur Dioxide and Oxygen, 739
Interlayer Adsorption of Ammonia and Pyridine in V_2O_5 Xerogel, 1597
An Electron Spin Resonance Study on the Re/ZrO_2 System, 1713
Radical Cations of Organic Carbonates, Trimethyl Borate and Methyl Nitrate. A Radiation–Electron Spin Resonance Study, 2367
Electron Spin Resonance Evidence for the Structure of Ag^{II} and Ag^{0} Solvates in Acetonitrile, 2729
Radiation Generation of Radical Cations of Amides. An Electron Spin Resonance Study, 2833
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 3.—The Stability of Unsupported $H_{3+n}(PV_nMo_{12-n}O_{40})\cdot xH_2O$ in Air and in a Vacuum, 3479
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 4.—The Reduction of $H_{3+n}(PV_nMo_{12-n}O_{40})\cdot xH_2O$ and the Influence of Supports on their Properties, 3491
The Utilization of Time-resolved Dielectric Loss to probe the Role of the Surface in Heterogeneous Photochemistry, 3625
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 1.—Air and Vacuum Dehydrations of $H_3[PMo_{12}O_{40}]\cdot xH_2O$ and $H_4[SiMo_{12}O_{40}]\cdot xH_2O$, 263
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 2.—Reduction of $H_3[PMo_{12}O_{40}]\cdot xH_2O$ and $H_4[SiMo_{12}O_{40}]\cdot xH_2O$ and Oxygen Adsorption, 273
Electron Capture in Single Crystals of Triphenylmethylarsonium Iodide. Electron Spin Resonance Detection of Ph_3AsI, 521

Electron Transfer
Reactivity of Solvated Electrons in Tetrahydrofuran, 2521
Inner-sphere Reorganization Energy of Ions in Solution using the Ion–Dipole Orbiting Potential, 2911
The Solvent Effect on the Electro-oxidation of 1,4-Phenylenediamine. The Influence of the Solvent Reorientation Dynamics on the One-electron Transfer Rate, 339
The Importance of the Electrostatic Interaction in Condensed-phase Photoinduced Electron Transfer, 509

Electronic Absorption Spectroscopy
Effect of Electrostatic Repulsion on the Aggregation of Azo Dyes in Aqueous Solution, 3141

Electroreduction
Raman Spectroscopic Observation of Adsorbates on Ag during Electrochemical Reduction of Nitrobenzene, 45

Electrostatic Repulsion
Effect of Electrostatic Repulsion on the Aggregation of Azo Dyes in Aqueous Solution, 3141

Emeraldine
Polyaniline, a Novel Conducting Polymer. Morphology and Chemistry of its Oxidation and Reduction in Aqueous Electrolytes, 2385

Enthalpic Interaction Coefficients
Cross Enthalpic Pair Interaction Coefficients with Water in *N*,*N*-Dimethylformamide and with *N*,*N*-Dimethylformamide in Water, 53
Thermochemical Investigation of NaI–Glycerol–Glycol (Ethanediol, 1,2-Propanediol, 1,3-Propanediol) Systems at 313.15 K, 1299

Enthalpies of Solution
Calorimetric Studies of NaI Solutions in Binary Organic Isodielectric Mixtures, 513

Enthalpies of Transfer
Microcalorimetric Measurement of the Enthalpies of Transfer of a Series of *m*-Alkoxyphenols from Isotonic Aqueous Solution to *Escherichia coli* Cells, 2929

Entropies
Entropies of Tetrahedral M—Phenyl Species, 993
The Hydration Entropies of Ions and their Effects on the Structure of Water, 233

Enzyme
Use of a Reversibly Immobilized Enzyme in the Flow Injection Amperometric Determination of Picomole Glucose Levels, 1265
Electrochemical Sensors: Theory and Experiment, 1033
Amperometric Enzyme Electrodes, 1237
Enzyme Entrapment in Electrically Conducting Polymers. Immobilisation of Glucose Oxidase in Polypyrrole and its Application in Amperometric Glucose Sensors, 1259
^1H and ^{19}F Nuclear Magnetic Resonance Investigation of the Active Site of Catalase, 2079

Equilibrium Constants
Remarks on Dependence on Temperature 'at Constant Volume', 2557
Special Features of Equilibrium Constants that are based on Volume Fractions, 2565

Equilibrium Dialysis
The Interaction of Aromatic Compounds with Poly(vinylpyrrolidone) in Aqueous Solution. Part 5.—Binding Isotherms for Phenols and *O*-Substituted Phenols, 291

Escherichia coli
Microcalorimetric Measurement of the Enthalpies of Transfer of a Series of *m*-Alkoxyphenols from Isotonic Aqueous Solution to *Escherichia coli* Cells, 2929

Ethane
Arrhenius Parameters for the Reaction $HO_2 + C_2H_4 \rightarrow C_2H_3 + H_2O_2$ over the Temperature Range 400–500 °C, 89
Chemisorption and Catalysis by Metal Clusters. Hydrogenation of Ethene and Hydrogenolysis of Ethane catalysed by Supported Ruthenium Clusters derived from $Ru_3(CO)_{12}$ and from $H_4Ru_4(CO)_{12}$, 2719

Ethene
Chemisorption and Catalysis by Metal Clusters. Hydrogenation of Ethene and Hydrogenolysis of Ethane catalysed by Supported Ruthenium Clusters derived from $Ru_3(CO)_{12}$ and from $H_4Ru_4(CO)_{12}$, 2719
Adsorption and Decomposition of Ethylene and Acetylene on Flat Ru(001) and Stepped Ru(1,1,10) Surfaces, 3197
Ethylene Glycol
Adsorption of Organic Substances at the Mercury/Ethylene Glycol Interface. Part 2.—Aromatic Compounds, 2481
Ethylene Oxide
Radical Cations of Ethylene Oxide and other Oxiranes prepared by Exposure to Ionizing Radiation. An Electron Spin Resonance Study, 167
Excess Pressures
Excess Pressures for Aqueous Solutions, 3681
Exchange
Reactions of Hydrocarbons on Alumina-supported Pt–Ir Bimetallic Catalysts. Part 2.—Exchange of Benzene with Deuterium, and Exchange and Hydrogenolysis of 2,2-Dimethylpropane, 3125
Expansibility
The Volumetric Behaviour of Poly(vinyl alcohol) in Aqueous Solution, 2791
Ferric Oxide Hydroxide
Fourier-transform Infrared Spectroscopy of Colloidal α-, β- and γ-Ferric Oxide Hydroxides, 2401
Ferricenium Ions
Reactivity of the Hydrated Electron with (ω-Carboxylatoalkyl)ferricenium Zwitterions. A Radiation Chemical Study, 161
Ferricyanide
Catalysis by Colloidal Gold of the Reactions between Ferricyanide and Thiosulphate Ions, 2277
Ferrimyoglobin
The Reaction of Ferrimyoglobin with Methylhydroperoxide, 2133
Ferrocene
Amperometric Enzyme Electrodes, 1237
Films
CO Adsorption at 77 K on KCl Films. An Infrared Investigation, 3611
Fischer–Tropsch Catalysis
Effect of Support and Promoter on the Coadsorption of Carbon Monoxide and Hydrogen on Fischer–Tropsch Cobalt Catalysts, 2635
Flash Photolysis
The Utilization of Time-resolved Dielectric Loss to probe the Role of the Surface in Heterogeneous Photochemistry, 3625
Flory–Huggins Theory
Application of the Flory–Huggins Theory to the Solubility of Solids in Glyceryl Trioleate, 243
Total and Preferential Sorption in Polar Ternary Systems, 1321
Flory–Prigogine Theory
Total and Preferential Sorption in Polar Ternary Systems, 1321
Fluoranil
Molecular Complexes. Part 18.—A Nuclear Magnetic Resonance Adaptation of the Continuous Variation (Job) Method of Stoicheiometry Determination, 533
Fluorescence
Dynamic Behaviour of Fluorescence Quenchers in Cetyltrimethylammonium Chloride Micelles, 109
Determination of Micelle Size and Polydispersity by Fluorescence Quenching. Theory and Numerical Results, 1813
Determination of Micelle Size and Polydispersity by Fuorescence Quenching. Experimental Results, 1829
Formaldehyde
Adsorption, Desorption and Surface Decomposition of Formaldehyde and Acetaldehyde on Metal Films Nickel, Palladium and Aluminium, 2221
Formic Acid
Electron Spectroscopic Studies of Formic Acid Absorption and Oxidation on Cu and Ag dosed with Barium, 1657
Fourier-transform Infrared Spectroscopy
Fourier-transform Infrared Spectroscopy of Colloidal α-, β- and γ-Ferric Oxide Hydroxides, 2401
Structural Aspects of Metal-oxide-pillared Sheet Silicates. An Investigation by Magic-angle-spinning Nuclear Magnetic Resonance, Fourier-transform Infrared Spectroscopy and Powder X-Ray Diffractometry, 3081
Fourier Transform Infrared Studies of the Irreversible Oxidation of Cyanide at Platinum Electrodes, 3525
Free Energies of Transfer
Ionic Solvation in Water–Cosolvent Mixtures. Part 12.—Free Energies of Transfer of Single Ions from Water into Water–Propan-1-ol Mixtures, 2577
Free Radicals
The Effect of Aqueous-phase Solubility on Free-radical Exit from Latex Particles, 1979
Entry Rate Coefficients in Emulsion Polymerization Systems, 2247
Furan
Infrared Study of the Adsorption of But-1-ene, Buta-1,3-diene, Furan and Maleic Anhydride on the Surface of Anhydrous Vanadyl Pyrophosphate, 3033
Gallium(III) Monothiocyanate
Spectrophotometric and Calorimetric Study of the Gallium(III) Monothiocyanate Complex in Dimethyl Sulphoxide Solutions, 1381
Gas Chromatography
Thermodynamic Properties of Binary Alcohol–Hydrocarbon Systems, 2435
The Reversed-flow Gas-chromatography Technique applied to the Kinetics of the Methanation of Carbon Monoxide, 2897

Gas Membrane Electrodes
Analytical Applications of Gas Membrane Electrodes, 1105
Gas Sensors
Conducting Polymer Gas Sensors, 1117
Semiconducting Tetrapyrrole Pigment Gas Sensors, 1127
Gas Transport
Isothermal and Non-isothermal Molecular Gas Transport in Model Non-homogeneous Porous Adsorbents, 2459
Gels
Acid–Base Equilibria in Polyelectrolyte Systems, 2353
Gibbs–Duhem Equation
Activity Coefficients in Mixed-electrolyte Solutions, I
An Application of the Gibbs–Duhem Relation to the Binary Mixed Electrolytes, 69
A New Analytical Solution of the Ternary Gibbs–Duhem Equation, 375
Glasses
Physicochemical Properties of a Plasma-exposed Glass Surface in a Closed System. Mechanistic Interrelation between Plasma-state Polymerization and Plasma-initiated Polymerization, 1441
Glucose
Amperometric Enzyme Electrodes, 1237
Use of a Reversibly Immobilized Enzyme in the Flow Injection Amperometric Determination of Picomole Glucose Levels, 1265
Glucose Oxidase
Enzyme Entrapment in Electrically Conducting Polymers. Immobilisation of Glucose Oxidase in Polypyrrole and its Application in Amperometric Glucose Sensors, 1259
Glycerol
Thermochemical Investigation of NaI–Glycerol–Glycol (Ethanediol, 1,2-Propanediol, 1,3-Propanediol) Systems at 313.15 K, 1299
Glyceryl Trioleate
Application of the Flory–Huggins Theory to the Solubility of Solids in Glyceryl Trioleate, 243
Glycol
Thermochemical Investigation of NaI–Glycerol–Glycol (Ethanediol, 1,2-Propanediol, 1,3-Propanediol) Systems at 313.15 K, 1299
Gold
Surface-enhanced Raman Scattering (SERS) Enhancements and Excitation Profiles for 3,5-Pyridinedicarboxylate and Dabsyl Aspartate on Colloidal Gold, 851
Catalysis by Colloidal Gold of the Reactions between Ferricyanide and Thiosulphate Ions, 2277
Catalytic Ignition on PdAu Wires, 3475
Graphite
A Study of the Effects of Heat Treatment on the Physical Properties of the Carbon Black Vulcan 3, 2915
Graphitised Carbon
Adsorption of ^{4}He on Spheron and Grafoil between 2 and 30 K, 483
Thermodynamics of the Adsorption from Aqueous Alcohol Solutions by Graphitised Carbon (Graphon), 2605
Haematite
Thermal Desorption and Infrared Studies of Primary Aliphatic Amines adsorbed on Haematite (α-Fe_2O_3), 2505
Heat Capacities
General Formulae Based on the Theory of Association Equilibria. Heat Capacity, Compressibility and Expansion of Associated Systems, 1605
Application of a Solvent-coupled Model to a Calculation of Partial Molar Isobaric Heat Capacities of Neutral and Ionic Solutes in Aqueous Solution. Estimates of Isobaric Heat Capacities of Activation, 2989
Adsorption of ^{4}He on Spheron and Grafoil between 2 and 30 K, 483
Standard Thermodynamic Functions of the Gaseous Actinyl Ions MO_2^{n+} and for their Hydration, 2873
The Thermodynamics of Solvation of Ions. Part 1.—The Heat Capacity of Hydration at 298.15 K, 3255
Helium
Adsorption of ^{4}He on Spheron and Grafoil between 2 and 30 K, 483
Henry's Law
On the Fundamental Concepts underlying Henry-law Adsorption and Adsorbed Gas Transport in Porous Solids, 2531
12-Heteropoly Acid
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 4.—The Reduction of $H_{3+n}(PV_nMo_{12-n}O_{40})\cdot xH_2O$ and the Influence of Supports on their Properties, 3491
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 3.—The Stability of Unsupported $H_{3+n}(PV_nMo_{12-n}O_{40})\cdot xH_2O$ in Air and in a Vacuum, 3479
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 1.—Air and Vacuum Dehydrations of $H_3[PMo_{12}O_{40}]\cdot xH_2O$ and $H_4[SiMo_{12}O_{40}]\cdot xH_2O$, 263
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 2.—Reduction of $H_3[PMo_{12}O_{40}]\cdot xH_2O$ and $H_4[SiMo_{12}O_{40}]\cdot xH_2O$ and Oxygen Adsorption, 273
Hexamethylbenzene
Molecular Complexes. Part 18.—A Nuclear Magnetic Resonance Adaptation of the Continuous Variation (Job) Method of Stoicheiometry Determination, 533
Histidine
One-electron Oxidation of Iron(II) Complexes of Tryptophan and Histidine. A Pulse-Radiolysis Study, 1575

Homologation
Homologation of Small Alkanes on Pt, Pd and Ni Catalysts. Contribution of Intermediate Carbenes to Skeletal Isomerization, 103
Host–Guest Complexes
Ion Recognition by Macrocyclic Hosts, 1145
Hydration
Solution Properties of Water in Molten $AgNO_3$–$LiNO_3$ Mixtures as derived from Vapour-pressure Measurements on $AgNO_3$–$LiNO_3$–H_2O Melts, 1853
Standard Thermodynamic Functions of the Gaseous Actinyl Ions MO_2^{n+} and for their Hydration, 2873
The Thermodynamics of Solvation of Ions. Part 1.—The Heat Capacity of Hydration at 298.15 K, 3255
An ^{17}O Nuclear Magnetic Resonance Relaxation-time Study of Sucrose–Water Interactions, 451
Hydrocarbons
Thermodynamic Properties of Binary Alcohol–Hydrocarbon Systems, 2435
Limitations of Evaluation Methods for Inhibited Oxidation Processes in the Liquid Phase, 2621
Reactions of Hydrocarbons on Alumina-supported Pt–Ir Bimetallic Catalysts. Part 1.—Exchange of Methane and Cyclopentane with Deuterium, and Hydrogenolysis of Butane, Pentane and Cyclopentane, 3113
Reactions of Hydrocarbons on Alumina-supported Pt–Ir Bimetallic Catalysts. Part 2.—Exchange of Benzene with Deuterium, and Exchange and Hydrogenolysis of 2,2-Dimethylpropane, 3125
Hydrodesulphurization
Correlation between Hydrodesulphurization Activity and Reducibility of Unsupported MoS_2-based Catalysts promoted by Group VIII Metals, 2423
Hydrogen
Solution of Hydrogen in Thin Palladium Films, 2175
Behaviour of Dinitrogen Species adsorbed on a Co/Al_2O_3 Catalyst with or without Coadsorbed Hydrogen studied by Infrared Spectroscopy, 2269
Effect of Support and Promoter on the Coadsorption of Carbon Monoxide and Hydrogen on Fischer–Tropsch Cobalt Catalysts, 2635
Hydrogen Bonding
Infrared Studies and Thermodynamics of Hydrogen Bonding in 2-Halogenoethanols and 3-Halogenopropanols, 663
Intramolecular Hydrogen Bonding and Conformational Behaviour of *N*-Methyldiethanolamine and Triethanolamine, 681
Intramolecular Hydrogen Bonding and Intermolecular Association of Amino Alcohols, 691
Solvent Effects in OH Overtone Spectra of Methanol, 1289
Structure of Water in Solutions in the Subcooled Region from Freezing-point Depressions, 1663
Hydrogen Bonding. Part 1.—Equilibrium Constants and Enthalpies of Complexation for Monomeric Carboxylic Acids with *N*-Methylpyrrolidinone in 1,1,1-Trichloroethane, 3501
Hydrogen Evolution
The Hydrogen Evolution Reaction under Mixed Kinetic Control, 3343
Hydrogen Halides
Chemisorptive Replacement of Surface Oxygen by Hydrogen Halides (HCl and HBr) at Pb(110) Surfaces. Photoelectron Spectroscopic and Kinetic Evidence for a Metastable Chloride Overlayer, 723
Hydrogenation
Hydrogenation of Carbon Dioxide and Carbon Monoxide over Supported Platinum Catalysts, 1681
Non-steady-state and Transient Effects in Medium-pressure Hydrogenation of Carbon Monoxide over Rhodium Catalysts, 431
Hydrogenoalkanols
Infrared Studies and Thermodynamics of Hydrogen Bonding in 2-Halogenoethanols and 3-Halogenopropanols, 663
Hydrogenolysis
Hydrogenolysis of Alkanes. Part 3.—Hydrogenolysis of n-Hexane and Methylcyclopentane over variously treated Ru/TiO_2 Catalysts, 1985
Reactions of Hydrocarbons on Alumina-supported Pt–Ir Bimetallic Catalysts. Part 1.—Exchange of Methane and Cyclopentane with Deuterium, and Hydrogenolysis of Butane, Pentane and Cyclopentane, 3113
Hydrolysis
Rates and Activation Parameters of Alkaline Hydrolysis of the 2-Carbomethoxypropionate Ion in Aqueous Mixtures of Dimethyl Sulphoxide, 1973
Hydroponic Solutions
Trace-metal Analysis in Hydroponic Solutions, 1071
Hydroxyalkyl Radicals
Reactions of Hydroxyalkyl Radicals with Uracil, 2103
Hysteresis
Isobaric and Isothermal Hysteresis in Metal Hydrides and Oxides, 2589
Cooperative Effects in Heterogeneous Catalysis. Part 1.—Phenomenology of the Dynamics of Carbon Monoxide Oxidation on Palladium embedded in a Zeolite Matrix, 3315
Imino Acids
Aqueous Solutions containing Amino Acids and Peptides. Part 24.—Free Energetic and Enthalpic Coefficients for the Interactions of some Prolyl and Sarcosyl Terminally Substituted Compounds at 25 °C, 2965
Immunosensors
Biosensors based on Reversible Reactions at Blocked and Unblocked Electrodes, 1169
Inclusion Complexes
Complexation of Roccellin by β- and γ-Cyclodextrin, 2333

Inclusion Complexes (*cont.*)
Mechanism of Inclusion-compound Formation for Binding of Organic Dyes, Ions and Surfactants to α-Cyclodextrin Studied by Kinetic Methods Based on Competition Experiments, 1271
Thermodynamics of Formation of Inclusion Compounds in Water. α-Cyclodextrin–Alcohol Adducts at 298.15 K, 2089
Kinetic and Equilibrium Studies associated with the Formation of Inclusion Compounds involving n-Butanol and n-Pentanol in Aqueous Cyclodextrin Solutions, 2111
A Kinetic and Equilibrium Study of the Inclusion of Pyronine B by β- and γ-Cyclodextrin, 2123
Infrared Spectroscopy
Infrared Studies and Thermodynamics of Hydrogen Bonding in 2-Halogenoethanols and 3-Halogenopropanols, 663
Surface Reduction in Low-temperature Formation of Nickel Oxide from Different Nickel Salts. Thermal Analysis, Surface Area, Electron Microscopy and Infrared Studies, 747
Effects of Different Surface Species on the Infrared Spectrum of CO adsorbed on RH/Al_2O_3, 883
Solvent Effects in OH Overtone Spectra of Methanol, 1289
Infrared Study of the Adsorption of Octadecylamine at the MgO/CCl_4 Interface. A Comparison with Investigations of the Adsorption of Octadecylamine on SiO_2 and Al_2O_3, 1527
Infrared Studies of Probe Molecules adsorbed on Calcium Oxide, 1911
Spectroscopic Investigation of Sulphidation of Zinc and Lead Carbonates, 2043
Application of Infrared Spectroscopy to the Measurement of Surface and Bulk Oxidation/Reduction States of MoO_3, 2155
Behaviour of Dinitrogen Species adsorbed on a Co/Al_2O_3 Catalyst with or without Coadsorbed Hydrogen studied by Infrared Spectroscopy, 2269
Thermal Desorption and Infrared Studies of Primary Aliphatic Amines adsorbed on Haematite (α-Fe_2O_3), 2505
Infrared Study of Pyridine Adsorption on Rutile and Silica-coated Rutile Immersed in Heptane, 2569
Surface Acidity of some Re_2O_7-containing Metathesis Catalysts. An *in situ* Fourier transform Infrared Study using Pyridine Adsorption, 2707
Infrared Study of Water and Pyridine Adsorption on the Surface of Anhydrous Vanadyl Pyrophosphate, 2773
Infrared Study of the Adsorption of Carbon Monoxide, Carbon Dioxide, Acetic Acid and Acetic Anhydride on the Surface of Anhydrous Vanadyl Pyrophosphate, 3013
Infrared Study of the Adsorption of But-1-ene, Buta-1,3-diene, Furan and Maleic Anhydride on the Surface of Anhydrous Vanadyl Pyrophosphate, 3033
Determination of Isotherms and Initial Heat of Adsorption of CO_2 and N_2O in Four A Zeolites from Infrared Measurements, 365
Characterization of Clays and Clay–Organic Systems. Cation Diffusion and Dehydroxylation, 545
***myo*-Inositol Hexakis(phosphate)**
A Comparative Study of the Protonation of *myo*-Inositol Hexakis(phosphate), 1935
Integrated Circuits
Solid-state Ion Sensors. Theoretical and Practical Issues, 1195
Interfacial Tension
Interfacial Tension Minima in Oil–Water Surfactant Systems. Behaviour of Alkane–Aqueous NaCl Systems containing Aerosol OT, 125
Interfacial Tension Minima in Oil–Water–Surfactant Systems. Effects of Alkane Chain Length and Presence of n-Alkanols in Systems containing Aerosol OT, 1755
Thermodynamics of the Adsorption from Aqueous Alcohol Solutions by Graphitised Carbon (Graphon), 2605
Interfacial Tension Minima in Oil–Water–Surfactant Systems. Systems containing Pure Non-ionic Surfactants, Alkanes and Inorganic Salts, 2951
Intramolecular Association
Intramolecular Hydrogen Bonding and Intermolecular Association of Amino Alcohols, 691
Ion Association
Association of $Co(sep)^{3+}$ Ions with $S_2O_5^{2-}$ Ions. Spectrophotometric, Circular Dichroism and Solubility Measurements, 1429
Ion Exchange
Sensors from Polymer Modified Electrodes, 1051
Aspects of the Optimization of Poly(vinyl chloride) Matrix Membrane Ion-selective Electrodes, 1135
Acid–Base Equilibria in Polyelectrolyte Systems, 2353
Potentials of Ion-exchanged Synthetic Zeolite–Polymer Membranes, 3647
Spectroscopy of Proflavine adsorbed on Clays, 281
Ion-exchange Membrane Dialysis
Concentration Polarization and Water Dissociation in Ion-exchange Membrane Electrodialysis, 2065
Ion Exchangers
Design of Anion-selective Membranes for Clinically Relevant Sensors, 1179
Ion–Molecule Interactions
Application of the Competitive Preferential Solvation Theory to Ion–Molecule Interactions, 1789
Ion-selective Electrodes
Ion Recognition by Macrocyclic Hosts, 1145
New Host–Guest Carriers, 1161
Ion-selective Electrodes based on Siderophores, 1187
Recent Advances in Microelectronic Ion-sensitive Devices (ISFETs). The Operational Transducer, 1209
Coated Wire Ion-selective Electrodes. Principles and Practice, 1217

Ion Sensors
Solid-state Ion Sensors. Theoretical and Practical Issues, 1195
Ion Transport
Interfacial Surface Charge and the Selectivity of Cation Transport through a Liquid Membrane by a Lipophilic Crown Ether Carboxylic Acid, 617
Ionic Solutions
Inner-sphere Reorganization Energy of Ions in Solution using the Ion–Dipole Orbiting Potential, 2911
Ionic Solvation in Water–Cosolvent Mixtures. Part 12.—Free Energies of Transfer of Single Ions from Water into Water–Propan-1-ol Mixtures, 2577
Ionization Equilibria
Ionization Equilibria of Cobalt(II) Chloride in *N,N*-Dimethylformamide, 1703
Iridium
Reactions of Hydrocarbons on Alumina-supported Pt–Ir Bimetallic Catalysts. Part 1.—Exchange of Methane and Cyclopentane with Deuterium, and Hydrogenolysis of Butane, Pentane and Cyclopentane, 3113
Reactions of Hydrocarbons on Alumina-supported Pt–Ir Bimetallic Catalysts. Part 2.—Exchange of Benzene with Deuterium, and Exchange and Hydrogenolysis of 2,2-Dimethylpropane, 3125
Iron
Ion-selective Electrodes based on Siderophores, 1187
Kinetics of the β-Hydroxy Elimination Reactions from the Protoporphyrin Iron(III)–$CHRCH_2OH$ Complexes in Aqueous Solutions. A Pulse-radiolytic Study, 3431
Micellar Inhibition of the Aquation of Tris-(3,4,7,8-tetramethyl-1,10-phenanthroline)iron(II) by Sodium Dodecyl Sulphate in Aqueous Acid Medium, 2011
ISFETs
Solid-state Ion Sensors. Theoretical and Practical Issues, 1195
Isomerization
Reactions of Recoil ^{38}Cl Atoms with Dichloroethanes, 3003
Isopropyl Alcohol
Catalytic Decomposition of Isopropanol over Chromite Spinels MCr_2O_4 (M = Ni, Mn and Mg), 2665
Isotope Exchange
Exchange of Metal Atoms in Solid Mixed-valence $Tl^{I}_{\frac{1}{2}}Tl^{III}Cl_4$. Conductivity and Positron Annihilation Investigations, 2825
Jones–Dole Equation
The Viscosity and Structure of Solutions. Part 1.—A New Theory of the Jones–Dole *B*-Coefficient and the Related Activation Parameters: Application to Aqueous Solutions, 563
Kinetics
Reactivity of the Hydrated Electron with (ω-Carboxylatoalkyl)ferricenium Zwitterions. A Radiation Chemical Study, 161
Mechanism of Inclusion-compound Formation for Binding of Organic Dyes, Ions and Surfactants to α-Cyclodextrin Studied by Kinetic Methods Based on Competition Experiments, 1271
Kinetic Investigation of the Oxidation of Bromide Ions by Cobalt(III). Part 2.—The Influence of Pyridine and Hydrocarbon on the Reaction in Acetic Acid Solvent, 1405
Solubilities of Salts and Kinetics of Reaction between Hydroxide Ions and Iron(II)–Di-imine Complexes in Water–Methanol Mixtures. Derivation of Single-ion Transfer Chemical Potentials and their Application to Analysis of Solvent Effects of Kinetic Parameters, 1471
Inhibition of the Thin-film Oxidation of n-Dodecane by *p*-Methoxyphenol, 1965
Rates and Activation Parameters of Alkaline Hydrolysis of the 2-Carbomethoxypropionate Ion in Aqueous Mixtures of Dimethyl Sulphoxide, 1973
Entry Rate Coefficients in Emulsion Polymerization Systems, 2247
The Reversed-flow Gas-chromatography Technique applied to the Kinetics of the Methanation of Carbon Monoxide, 2897
Thermal Properties, Thermochemistry and Kinetics of the Thermal Dissociation of Hydrochlorides of some Mononitrogen Aromatic Bases, 3069
Kinetics of Metal Oxide Dissolution. Oxidative Dissolution of Chromium(III) Oxide by Potassium Permanganate, 3245
The Hydrogen Evolution Reaction under Mixed Kinetic Control, 3343
Adsorption and Desorption Kinetics of Oxygen on Tin–Antimony Oxide Catalyst by Quasi-constant Coverage Methods, 3601
Thermal Decomposition of Solid Sodium Bicarbonate, 3709
A Fast Kinetic Study of the Formation and Decay of *N,N,N',N'*-Tetramethyl-*p*-phenylenediamine Radical Cation in Aqueous Solution, 359
Laser Flash Photolysis
Studies of Alkylphenothiazinesulphonate Micellar Assemblies in Aqueous Solution, 2615
Latex
Ordered Solution Structure of a Monodispersed Polystyrene Latex as studied by the Reflection Spectrum Method, 3163
Transmitted Light Spectrum Measurements. A New and Convenient Technique for the Study of the Ordered Structure of Monodispersed Polystyrene Latex in Solution and Film, 3175
Ordered Solution Structure of a Monodispersed Polystyrene Latex as studied by the Transmitted Light Spectrum Method, 3185
Entry Rate Coefficients in Emulsion Polymerization Systems, 2247
Lead
Chemisorptive Replacement of Surface Oxygen by Hydrogen Halides (HCl and HBr) at Pb(110) Surfaces. Photoelectron Spectroscopic and Kinetic Evidence for a Metastable Chloride Overlayer, 723

Lead (*cont.*)
The Electrical Conductance of Molten Lead(II) 9,10-Dihydroxyoctadecanoate and some Binary Mixtures with Lead(II) Octadecanoate, 3357
Lewis Acids
Mechanism of n-Alkane Transformations over a Solid Superacid of Lewis Character, $Al_2O_3/AlCl_3$, 1687
Ligand Complexation
Free-energy Parameters for the Complexation of Metal Ions and Cryptand 222 in Propan-1-ol and for the Transfer and Partition of Cryptand 222 in Water–Alcohol Systems, 2811
Ligation
Kinetics of the Axial Ligation of Aquocobaloximes in the Presence of Cetyltrimethylammonium Acetate Micelles, 319
Light Scattering
Association Characteristics of Synthetic Non-ionic Surfactants in Aqueous Solution, 1903
Rheo-optics of Suspensions of Anisometric Particles. Part 1.—Monodisperse Ellipsoidal Particles, 457
Rheo-optics of Suspensions of Anisometric Particles. Part 2.—Polydisperse, Brownian Ellipsoidal Particles, 473
Stereoassociation of Poly(Methyl Methacrylate). Relationship between a Synergic Effect in the Solution Power and a Change in the Solvent Complexing Capacity, 1333
Liquid Crystals
Optical Anisotropies of Alkylcyanobicyclohexyls and Related Compounds, 3367
Optical Anisotropies of Alkylcyanobiphenyls, Alkoxycyanobiphenyls and Related Compounds, 3381
Liquid Drops
The Curvature Dependence of Surface Tension of Small Droplets, 1421
Lithium
Application of Microelectrodes to the Study of the $Li|Li^+$ Couple in Ether Solvents. Part 2.—Temperature Dependence, 179
Lysozyme
Protonic and Ionic Conduction in Lysozyme. Hydration and Field-dependent Effects, 143
Magic Angle Spinning Nuclear Magnetic Resonance Spectroscopy
High-resolution Solid-state Magic Angle Spinning Nuclear Magnetic Resonance Investigations of Surface Hydroxy Groups on Modified Silica Gel, 1879
Structural Aspects of Metal-oxide-pillared Sheet Silicates. An Investigation by Magic-angle-spinning Nuclear Magnetic Resonance, Fourier-transform Infrared Spectroscopy and Powder X-Ray Diffractometry, 3081
Characterization of Clays and Clay–Organic Systems. Cation Diffusion and Dehydroxylation, 545
Magnesium Oxide
γ-Radiolysis of Polycrystalline Magnesium Oxide, 715
Resonance Energy Transfer from Solid to Adsorbed Molecules under Radiolysis of the N_2O—MgO System, 815
Catalytic Properties of Magnesium Oxides Doped with Sodium Compounds. 1357
Infrared Study of the Adsorption of Octadecylamine at the MgO/CCl_4 Interface. A Comparison with Investigations of the Adsorption of Octadecylamine on SiO_2 and Al_2O_3, 1527
Magnesium Sulphate
Viscosity of Na_2SO_4 and $MgSO_4$ Solutions in Ethanol–Water Mixtures at 15, 25 and 35 °C, 3307
Maleic Anhydride
Infrared Study of the Adsorption of But-1-ene, Buta-1,3-diene, Furan and Maleic Anhydride on the Surface of Anhydrous Vanadyl Pyrophosphate, 3033
Manganese
Decay of High-valent Manganese Porphyrins in Aqueous Solution and Catalysed Formation of Oxygen, 3215
Mass Spectrometry
Protonic and Ionic Conduction in Lysozyme. Hydration and Field-dependent Effects, 143
Membranes
Interfacial Surface Charge and the Selectivity of Cation Transport through a Liquid Membrane by a Lipophilic Crown Ether Carboxylic Acid, 617
Aspects of the Optimization of Poly(vinyl chloride) Matrix Membrane Ion-selective Electrodes, 1135
Design of Anion-selective Membranes for Clinically Relevant Sensors, 1179
Mechanism of Permeation through Molecular-sieve Carbon Membrane. Part 1.—The Effect of Adsorption and the Dependence on Pressure, 2057
Osmosis and Reverse Osmosis. Part 2.—The Separation Factor of Reverse Osmosis and its Connection with Isotonic Osmosis, 3293
Potentials of Ion-exchanged Synthetic Zeolite–Polymer Membranes, 3647
Mercury
Adsorption of Organic Substances at the Mercury/Ethylene Glycol Interface. Part 2.—Aromatic Compounds, 2481
Metachromism
The Metachromism of Methyl Orange with Electrolytes and Possible Salting-out, 119
Metal Clusters
Chemisorption and Catalysis by Metal Clusters: Characterisation and Chemisorption. Properties of $Ru_3(CO)_{12}$ and $H_4RU_4(CO)_{12}$ Supported on Alumina, Silica and Titania, 189
Metal-complex Ions
Interactions between Metal-complex Ions and Water. Part 3.—Entropies of Solution and Heat Capacity Changes of Metal-complex Ions in Water at 25 °C, 2843

Metal Films
Adsorption, Desorption and Surface Decomposition of Formaldehyde and Acetaldehyde on Metal Films Nickel, Palladium and Aluminium, 2221
Metal Hydrides
Isobaric and Isothermal Hysteresis in Metal Hydrides and Oxides, 2589
Metal–Ligand Complexation
Metal–Ligand Complex Formation in the Presence of Ionic Micelles. Equilibrium and Kinetics of the Reaction between Cupric Ion and Benzoylacetone in the Presence of Ionic Micelles of SDS or DTAC1, 1515
Metal Oxides
Kinetics of Metal Oxide Dissolution. Oxidative Dissolution of Chromium(III) Oxide by Potassium Permanganate, 3245
Isobaric and Isothermal Hysteresis in Metal Hydrides and Oxides, 2589
Metal–Phenyl Species
Entropies of Tetrahedral M—Phenyl Species, 993
Metalloenzymes
One-electron Oxidation of Iron(II) Complexes of Tryptophan and Histidine. A Pulse-Radiolysis Study, 1575
Metalloporphyrin
Decay of High-valent Manganese Porphyrins in Aqueous Solution and Catalysed Formation of Oxygen, 3215
The Effect of Heat Treatment on Group VIIIB Porphyrins as Electrocatalysts in the Cathodic Reduction of Oxygen, 1561
Metathesis
$Re_2O_7/Al_2O_3 \cdot B_2O_3$ Metathesis Catalysts, 1945
Methanation
The Reversed-flow Gas-chromatography Technique applied to the Kinetics of the Methanation of Carbon Monoxide, 2897
Methanol
Solvent Effects in OH Overtone Spectra of Methanol, 1289
The Adsorption of Methanol on Hydrophilic, Hydrophobic and Mixed Silicas, 1351
Coadsorption of Methanol and Carbon Dioxide on Alumina, 3019
Calorimetric Studies of NaI Solutions in Binary Organic Isodielectric Mixtures, 513
***p*-Methoxyphenol**
Inhibition of the Thin-film Oxidation of n-Dodecane by *p*-Methoxyphenol, 1965
Methyl Nitrate
Radical Cations of Organic Carbonates, Trimethyl Borate and Methyl Nitrate. A Radiation–Electron Spin Resonance Study, 2367
Methyl Orange
The Metachromism of Methyl Orange with Electrolytes and Possible Salting-out, 119
Methyl Viologen
Effect of Light upon Electroreduction of 4,4′-Bipyridyl and Methyl Viologen in Aqueous Solutions, 585
***N*-Methylacetamide**
Characterization of Anion Solvation in *N*-Methylacetamide Transfer Enthalpies of Anions and the Reaction Rates of Ethyl Iodide with Bromide Ion in *N*-Methylacetamide–Acetonitrile and *N*-Methylacetamide–*N*,*N*-Dimethylacetamide Mixtures, 2141
Methylhydroperoxide
The Reaction of Ferrimyoglobin with Methylhydroperoxide, 2133
Metmyoglobin
The Reaction of Ferrimyoglobin with Methylhydroperoxide, 2133
Micelles
Volumetric Investigation of the Hydrotropic Action of Aqueous Sodium Propionate Solutions on Pentanol at 298 K, 77
Dynamic Behaviour of Fluorescence Quenchers in Cetyltrimethylammonium Chloride Micelles, 109
Interfacial Tension Minima in Oil–Water Surfactant Systems. Behaviour of Alkane–Aqueous NaCl Systems containing Aerosol OT, 125
A Comparison of the Conformation of Micellar and Non-micellar Sodium Octanoate and Octanoic Acid using ^{13}C–^1H and ^1H–^1H Vicinal Spin–Spin Coupling Constants, 255
Metal–Ligand Complex Formation in the Presence of Ionic Micelles. Equilibrium and Kinetics of the Reaction between Cupric Ion and Benzoylacetone in the Presence of Ionic Micelles of SDS or DTAC1, 1515
Effects of Pressure on the Photodimerization of Acenaphthylene in Micellar Systems, 1619
Determination of Micelle Size and Polydispersity by Fluorescence Quenching. Theory and Numerical Results, 1813
Determination of Micelle Size and Polydispersity by Fuorescence Quenching. Experimental Results, 1829
Micellar Inhibition of the Aquation of Tris-(3,4,7,8-tetramethyl-1,10-phenanthroline)iron(II) by Sodium Dodecyl Sulphate in Aqueous Acid Medium, 2011
Modification of the Order of Reaction and Reaction Rate of Nucleophilic Aromatic Substitution in Micellar Solutions, 2301
Chemical Relaxation in Mixed Micellar Solutions containing Surface-active Drugs and Hexadecyltrimethylammonium Bromide Micelles, 2497
Solubilisation of Two-component Oil Mixtures by Micellar Surfactant Solutions, 3205
Kinetics of the Axial Ligation of Aquocobaloximes in the Presence of Cetyltrimethylammonium Acetate Micelles, 319
Micellisation and Surface Properties of Oligo(oxyethylene) Methyl-n-alkyl and di-n-Alkyl Ethers, 1865
Emission Characteristics and Micellization of Cationic 1,4-Bis(*β*-pyridyl-2-vinyl)benzene Laser Dye, 909

Microelectrodes
Application of Microelectrodes to the Study of the Li | Li^+ Couple in Ether Solvents. Part 2.—Temperature Dependence, 179
Microemulsion
The Partitioning of Solutes between Water-in-Oil Microemulsions and Conjugate Aqueous Phases, 2651
Volumetric Investigation of the Hydrotropic Action of Aqueous Sodium Propionate Solutions on Pentanol at 298 K, 77
Interfacial Tension Minima in Oil–Water Surfactant Systems. Behaviour of Alkane–Aqueous NaCl Systems containing Aerosol OT, 125
A Quasi-elastic Neutron Scattering Study of Water-in-oil Microemulsions stabilised by Aerosol-OT. Effect of Additives including Solubilised Protein on Molecular Motions, 2311
Small-angle Neutron Scattering Studies of Microemulsions Stabilised by Aerosol-OT. Part 3.—The Effect of Additives on Phase Stability and Droplet Structure, 2411
Miscibility
Volumetric Investigation of the Hydrotropic Action of Aqueous Sodium Propionate Solutions on Pentanol at 298 K, 77
Mixed Oxides
Adsorption and Desorption Kinetics of Oxygen on Tin–Antimony Oxide Catalyst by Quasi-constant Coverage Methods, 3601
Mixing Functions
Liquid Structure and Second-order Mixing Functions for Benzene, Toluene and *p*-Xylene with n-Alkanes, 2977
Molar Volume
The Electrical Conductance of Molten Lead(II) 9,10-Dihydroxyoctadecanoate and some Binary Mixtures with Lead(II) Octadecanoate, 3357
Molecular Dynamics
The Curvature Dependence of Surface Tension of Small Droplets, 1421
Molecular Models
Molecular Models for Adsorbed Monolayers at Charged Interfaces, 977
Molecular Sieves
Mechanism of Permeation through Molecular-sieve Carbon Membrane. Part 1.—The Effect of Adsorption and the Dependence on Pressure, 2057
Molybdena
Structural Relationships in the Reduction of the Vanadia–Molybdena Intermediate Compound, 1673
Application of Infrared Spectroscopy to the Measurement of Surface and Bulk Oxidation/Reduction States of MoO_3, 2155
Molybdenum
Correlation between Hydrodesulphurization Activity and Reducibility of Unsupported MoS_2-based Catalysts promoted by Group VIII Metals, 2423
Adsorption and Decomposition of $Mo(CO)_6$ of Zeolite NaY, 2887
Monosaccharides
Conformation and Solvation. Hydrophobic Hydration and Preferential Solvation of some Monosaccharides in Mixtures of Water and *N*,*N*′-Dimethyl-formamide, 933
H-Mordenite
Superacid Sites in Zeolite H-Mordenite, 2151
n-Alkanols
Interfacial Tension Minima in Oil–Water–Surfactant Systems. Effects of Alkane Chain Length and Presence of n-Alkanols in Systems containing Aerosol OT, 1755
n-Butane
Chlorinated Alumina. Acidic Properties and Catalytic Activity towards n-Butane Isomerization, 1893
n-Heptane
Thermodynamics of Three Toluene-containing Mixtures Generalized van der Waals and Ising-like Models, 1839
Neutron Scattering
Contamination by Coherent Scattering of the Elastic Incoherent Structure Factor observed in Neutron Scattering Experiments, 1923
Short-range Order in Amorphous Poly(methyl methacrylate), 1929
A Quasi-elastic Neutron Scattering Study of Water-in-oil Microemulsions stabilised by Aerosol-OT. Effect of Additives including Solubilised Protein on Molecular Motions, 2311
Neutron Scattering of Supercooled Water in Silica Gels, 3447
Nickel
Electron Microscopy of Pt, Pd and Ni Particles in a NaX Zeolite Matrix, 205
Catalysis by Amorphous Metal Alloys. Part 4.—Structural Modification towards Metastable States and Catalytic Activity of Amorphous $Ni_{81}B_{19}$ Ribbon Alloy, 1771
Nickel Oxide
Surface Reduction in Low-temperature Formation of Nickel Oxide from Different Nickel Salts. Thermal Analysis, Surface Area, Electron Microscopy and Infrared Studies, 747
Comparative Dissolution Rates of Defective Nickel Oxides from Different Sources, 759
Nicotinamide
Chemically Modified Electrodes for the Electrocatalytic Oxidation of Nicotinamide Coenzymes, 1245
Nitric Oxide
The Support Effect of CuO Catalyst for the Reduction of Nitric Oxide with Hydrogen or Ammonia, 61
Nitrobenzene
Raman Spectroscopic Observation of Adsorbates on Ag during Electrochemical Reduction of Nitrobenzene, 45
Nitrogen
Thermal Conductivity of Argon, Nitrogen and Carbon Dioxide at Elevated Temperatures and Pressures, 2235

Nitrogen (*cont.*)
Behaviour of Dinitrogen Species adsorbed on a Co/Al_2O_3 Catalyst with or without Coadsorbed Hydrogen studied by Infrared Spectroscopy, 2269
Nitrogen Oxides
Adsorption and Reduction of Nitrogen Monoxide by Potassium-doped Carbon, 3657
Resonance Energy Transfer from Solid to Adsorbed Molecules under Radiolysis of the N_2O—MgO System, 815
Determination of Isotherms and Initial Heat of Adsorption of CO_2 and N_2O in Four A Zeolites from Infrared Measurements, 365
Nitromethane
Thermodynamic Parameters of Electrolyte Solutions in Nitromethane, 3275
Nuclear Magnetic Relaxation
Deuterium Longitudinal Nuclear Magnetic Relaxation of Heavy Water in Alkylammonium Chloride Solution. Effect of Deuterium Exchanges between Water and Polar Heads, 2185
Nuclear Magnetic Resonance Spectroscopy
A Comparison of the Conformation of Micellar and Non-micellar Sodium Octanoate and Octanoic Acid using ^{13}C–^1H and ^1H–^1H Vicinal Spin–Spin Coupling Constants, 255
A High-molecular Solid-state Nuclear Magnetic Resonance Study of the Ordering of Silicon and Aluminium in Synthetic Mazzite (Zeolite Omega), 569
Application of the Competitive Preferential Solvation Theory to Ion–Molecule Interactions, 1789
^1H and ^{19}F Nuclear Magnetic Resonance Investigation of the Active Site of Catalase, 2079
The Effect of Acid Treatment on the Properties of Dealuminated Y Zeolite, 2817
^{13}C Nuclear Magnetic Resonance Investigations of Carbon Monoxide in Decationated Zeolites of Type Y, 3053
A Nuclear Magnetic Resonance Study of the Solvatochroism of a Pyridinium Betaine, 3097
Effect of Electrostatic Repulsion on the Aggregation of Azo Dyes in Aqueous Solution, 3141
Phosphorus and Proton Nuclear Magnetic Resonance Studies of Transition-metal Complexes of Triphosphate and Pyrophosphate in Aqueous Solution, 3149
An ^{11}B Nuclear Magnetic Resonance Study of the Reaction of the Tetrahydroxyborate Ion with Polyhydroxy Compounds, 3407
Polysilicate Equilibria in Concentrated Sodium Silicate Solutions, 3635
An ^{17}O Nuclear Magnetic Resonance Relaxation-time Study of Sucrose–Water Interactions, 451
Molecular Complexes. Part 18.—A Nuclear Magnetic Resonance Adaptation of the Continuous Variation (Job) Method of Stoicheiometry Determination, 533
Nucleophilic Aromatic Substitution
Modification of the Order of Reaction and Reaction Rate of Nucleophilic Aromatic Substitution in Micellar Solutions, 2301
Octadecylamine
Infrared Study of the Adsorption of Octadecylamine at the MgO/CCl_4 Interface. A Comparison with Investigations of the Adsorption of Octadecylamine on SiO_2 and Al_2O_3, 1527
Octan-1-ol
Thermodynamic Study of Organic Compounds in Octan-1-ol. Processes of Transfer from Gas and from Dilute Aqueous Solution, 2547
Octanoic Acid
A Comparison of the Conformation of Micellar and Non-micellar Sodium Octanoate and Octanoic Acid using ^{13}C–^1H and ^1H–^1H Vicinal Spin–Spin Coupling Constants, 255
***O*-n-Octyltetraethylene Glycol**
Mixed Adsorption of a Non-ionic and an Anionic Surfactant at the Carbon–Aqueous Solution Interface, 1805
Oleic Acid
Evidence for a Thermotropic Phase Transition in Oleic Acid, 439
Oligo(oxyethylene) Ethers
Micellisation and Surface Properties of Oligo(oxyethylene) Methyl-n-alkyl and di-n-Alkyl Ethers, 1865
Optical Anisotropy
Optical Anisotropies of Alkylcyanobicyclohexyls and Related Compounds, 3367
Optical Anisotropies of Alkylcyanobiphenyls, Alkoxycyanobiphenyls and Related Compounds, 3381
Orange IV
The Hydrophobic Behaviour of Orange IV in Water and in Aqueous Electrolyte Solutions, 2377
Organic Semiconductors
Conducting Polymer Gas Sensors, 1117
Semiconducting Tetrapyrrole Pigment Gas Sensors, 1127
Oscillatory Systems
Irrelevance of Gas Evolution to Oscillations in the Belousov–Zhabotinsky System, 2999
Osmometry
Association Characteristics of Synthetic Non-ionic Surfactants in Aqueous Solution, 1903
Osmosis
Osmosis and Reverse Osmosis. Part 1.—The Frictional Coefficients in a General Transport Equation, 3289
Osmosis and Reverse Osmosis. Part 2.—The Separation Factor of Reverse Osmosis and its Connection with Isotonic Osmosis, 3293
Cluster Theory Applied to Aqueous (2:2) Electrolytes over a Wide Concentration Range. Osmotic Coefficients Association and Redissociation, 921
Osmotic Coefficients of Aqueous NaCl and KCl Solutions. Temperature–Concentration Behaviour of the Bahe Lattice Model, 2167
Aqueous Solutions containing Amino Acids and Peptides. Part 24.—Free Energetic and Enthalpic Coefficients for the Interactions of some Prolyl and Sarcosyl Terminally Substituted Compounds at 25 °C, 2965

Oxidation
The Oxidation of Carbon Monoxide on a Platinum Catalyst at Atmosphere Pressure, 1389
Kinetic Investigation of the Oxidation of Bromide Ions by Cobalt(III). Part 2.—The Influence of Pyridine and Hydrocarbon on the Reaction in Acetic Acid Solvent, 1405
Inhibition of the Thin-film Oxidation of n-Dodecane by *p*-Methoxyphenol, 1965
Limitations of Evaluation Methods for Inhibited Oxidation Processes in the Liquid Phase, 2621
A Fast Kinetic Study of the Formation and Decay of *N,N,N',N'*-Tetramethyl-*p*-phenylenediamine Radical Cation in Aqueous Solution, 359
Oxiranes
Radical Cations of Ethylene Oxide and other Oxiranes prepared by Exposure to Ionizing Radiation. An Electron Spin Resonance Study, 167
Oxygen
Chemisorptive Replacement of Surface Oxygen by Hydrogen Halides (HCl and HBr) at Pb(110) Surfaces. Photoelectron Spectroscopic and Kinetic Evidence for a Metastable Chloride Overlayer, 723
Electron Spin Resonance Study of the Radicals formed by Ultraviolet Irradiation of TiO_2 in the Presence of Sulphur Dioxide and Oxygen, 739
Kinetics and Mechanism of the Cobalt-catalysed Reaction of Oxygen and Sulphite at Very Low Concentrations, 869
Regeneration of Pentasil Zeolite Catalysts using Ozone and Oxygen, 1007
The Effect of Heat Treatment on Group VIIIB Porphyrins as Electrocatalysts in the Cathodic Reduction of Oxygen, 1561
Decay of High-valent Manganese Porphyrins in Aqueous Solution and Catalysed Formation of Oxygen, 3215
Ozone
Regeneration of Pentasil Zeolite Catalysts using Ozone and Oxygen, 1007
Palladium
Electron Microscopy of Pt, Pd and Ni Particles in a NaX Zeolite Matrix, 205
Solution of Hydrogen in Thin Palladium Films, 2175
Cooperative Effects in Heterogeneous Catalysis. Part 1.—Phenomenology of the Dynamics of Carbon Monoxide Oxidation on Palladium embedded in a Zeolite Matrix, 3315
Catalytic Ignition on PdAu Wires, 3475
Partial Molar Quantities
Application of a Solvent-coupled Model to a Calculation of Partial Molar Isobaric Heat Capacities of Neutral and Ionic Solutes in Aqueous Solution. Estimates of Isobaric Heat Capacities of Activation, 2989
Partition Coefficient
The Partitioning of Solutes between Water-in-Oil Microemulsions and Conjugate Aqueous Phases, 2651
Thermodynamic Parameters for Transfer of Resorcinol Monoethers from Water to Heptane and to Propylene Carbonate. Derivation and Analysis of Group Transfer Thermodynamic Paramaters, 2863
Pentanol
Kinetic and Equilibrium Studies associated with the Formation of Inclusion Compounds involving n-Butanol and n-Pentanol in Aqueous Cyclodextrin Solutions, 2111
Phase Diagrams
Volumetric Investigation of the Hydrotropic Action of Aqueous Sodium Propionate Solutions on Pentanol at 298 K, 77
A New Analytical Solution of the Ternary Gibbs–Duhem Equation, 375
Phase Equilibria
Phase Equilibria in Model Mixtures of Spherical Molecules of Different Sizes, 3461
Phase Transitions
Evidence for a Thermotropic Phase Transition in Oleic Acid, 439
Phenols
The Interaction of Aromatic Compounds with Poly(vinylpyrrolidone) in Aqueous Solution. Part 6.—Polymer Precipitation and Viscosity Studies with Phenols and *O*-Substituted Phenols, 635
1-Phenylbutane-1,3-dione
Metal–Ligand Complex Formation in the Presence of Ionic Micelles. Equilibrium and Kinetics of the Reaction between Cupric Ion and Benzoylacetone in the Presence of Ionic Micelles of SDS or DTACl, 1515
1,4-Phenylenediamine
The Solvent Effect on the Electro-oxidation of 1,4-Phenylenediamine. The Influence of the Solvent Reorientation Dynamics on the One-electron Transfer Rate, 339
Phosphate
Adsorption of Phosphate on Calcite, 1733
Phosphorus
The use of TiO_2 Contaminated with Phosphorus and Potassium as a Support for V_2O_5 Catalysts in the Selective Oxidation of Toluene, 1537
Photo-oxidation
Formation of an Epoxide Intermediate in the Photo-oxidation of Alkenes over Silica-supported Vanadium Oxide, 35
Kinetics of $O_2(^1\Delta_g)$ Photo-oxidation Reactions in Egg-yolk Lecithin Vesicles, 1627
Photocatalysis
Photocatalytic Dehydrogenation of Liquid Propan-2-ol by TiO_2. Part 2.—Mechanism, 2747
Electron-microscopic Observation of Photodeposited Pt on TiO_2 Particles in Relation to Photocatalytic Activity, 527
Photochemistry
Photocatalytic Dehydrogenation of Liquid Propan-2-ol by TiO_2. Part 1.—Kinetics, 607
Specific Quenching of the Photoexcited State of Tris(2,2'-bipyridine)ruthenium(II) by Colloidal Prussian Blue, 1637
The Utilization of Time-resolved Dielectric Loss to probe the Role of the Surface in Heterogeneous Photochemistry, 3625
Spectroscopy of Proflavine adsorbed on Clays, 281

Photodimerization
Effects of Pressure on the Photodimerization of Acenaphthylene in Micellar Systems, 1619
Photoelectron Spectroscopy
Chemisorptive Replacement of Surface Oxygen by Hydrogen Halides (HCl and HBr) at Pb(110) Surfaces. Photoelectron Spectroscopic and Kinetic Evidence for a Metastable Chloride Overlayer, 723
Photoionization
Studies of Alkylphenothiazinesulphonate Micellar Assemblies in Aqueous Solution, 2615
Phytic Acid
A Comparative Study of the Protonation of *myo*-Inositol Hexakis(phosphate), 1935
Plasmas
Physicochemical Properties of a Plasma-exposed Glass Surface in a Closed System. Mechanistic Interrelation between Plasma-state Polymerization and Plasma-initiated Polymerization, 1441
Platinum
Electron Microscopy of Pt, Pd and Ni Particles in a NaX Zeolite Matrix, 205
The Oxidation of Carbon Monoxide on a Platinum Catalyst at Atmosphere Pressure, 1389
A Single-turnover (STO) Study of the Effect of Heat on Catalyst Activity, 3025
Reactions of Hydrocarbons on Alumina-supported Pt–Ir Bimetallic Catalysts. Part 1.—Exchange of Methane and Cyclopentane with Deuterium, and Hydrogenolysis of Butane, Pentane and Cyclopentane, 3113
Reactions of Hydrocarbons on Alumina-supported Pt–Ir Bimetallic Catalysts. Part 2.—Exchange of Benzene with Deuterium, and Exchange and Hydrogenolysis of 2,2-Dimethylpropane, 3125
Fourier Transform Infrared Studies of the Irreversible Oxidation of Cyanide at Platinum Electrodes, 3525
Physicochemical Properties and Isomerization Activity of Chlorinated Pt/Al_2O_3 Catalysts, 3667
Electron-microscopic Observation of Photodeposited Pt on TiO_2 Particles in Relation to Photocatalytic Activity, 527
Point of Zero Charge
Effect of Temperature on the Point of Zero Charge and Surface Dissociation Constants of Aqueous Suspensions of γ-Al_2O_3, 3697
Polarography
Gibbs (Free) Energies of Transfer of Silver(I), Copper(I) and Potassium(I), 1955
Electrochemical Reduction of 2-Cyclohexen-1-ones in a Hydroethanolic Medium, 495
Polyacetylene
The Electrochemical Reduction of Polyacetylene with Selected Reducing Agents, 2323
Polyaniline
Polyaniline, a Novel Conducting Polymer. Morphology and Chemistry of its Oxidation and Reduction in Aqueous Electrolytes, 2385
Polyelectrolyte
A Non-equilibrium Configuration Theory of Polyelectrolyte Adsorption, 3233
Polyelectrolytes
Acid–Base Equilibria in Polyelectrolyte Systems, 2353
Polyhydroxy Compounds
An ^{11}B Nuclear Magnetic Resonance Study of the Reaction of the Tetrahydroxyborate Ion with Polyhydroxy Compounds, 3407
Polymerization
Interaction Parameters and the Equilibrium Cationic Polymerization of Tetrahydrofuran in Benzene, 899
Aqueous Latex Polymerization of Acrylonitrile. Kinetics, Particle Numbers and Particle Sizes, 943
Physicochemical Properties of a Plasma-exposed Glass Surface in a Closed System. Mechanistic Interrelation between Plasma-state Polymerization and Plasma-initiated Polymerization, 1441
Entry Rate Coefficients in Emulsion Polymerization Systems, 2247
Polymers
The Effect of Aqueous-phase Solubility on Free-radical Exit from Latex Particles, 1979
A Non-equilibrium Configuration Theory of Polyelectrolyte Adsorption, 3233
The Interaction of Aromatic Compounds with Poly(vinylpyrrolidone) in Aqueous Solution. Part 6.—Polymer Precipitation and Viscosity Studies with Phenols and *O*-Substituted Phenols, 635
Sensors from Polymer Modified Electrodes, 1051
Total and Preferential Sorption in Polar Ternary Systems, 1321
Polyaniline, a Novel Conducting Polymer. Morphology and Chemistry of its Oxidation and Reduction in Aqueous Electrolytes, 2385
Concentration Effects in Exclusion Chromatography. Quantitative Prediction in θ-Polymeric Systems, 2781
Poly(methyl methacrylate)
Stereoassociation of Poly(methyl methacrylate). Relationship between a Synergic Effect in the Solution Power and a Change in the Solvent Complexing Capacity, 1333
Short-range Order in Amorphous Poly(methyl methacrylate), 1929
Polypyrrole
Enzyme Entrapment in Electrically Conducting Polymers. Immobilisation of Glucose Oxidase in Polypyrrole and its Application in Amperometric Glucose Sensors, 1259
Polysilicates
Polysilicate Equilibria in Concentrated Sodium Silicate Solutions, 3635
Polystyrene
Ordered Solution Structure of a Monodispersed Polystyrene Latex as studied by the Reflection Spectrum Method, 3163
Transmitted Light Spectrum Measurements. A New and Convenient Technique for the Study of the Ordered Structure of Monodispersed Polystyrene Latex in Solution and Film, 3175
Ordered Solution Structure of a Monodispersed Polystyrene Latex as studied by the Transmitted Light Spectrum Method, 3185

Poly(vinyl alcohol)
The Volumetric Behaviour of Poly(vinyl alcohol) in Aqueous Solution, 2791
Poly(vinyl chloride)
Aspects of the Optimization of Poly(vinyl chloride) Matrix Membrane Ion-selective Electrodes, 1135
Contamination by Coherent Scattering of the Elastic Incoherent Structure Factor observed in Neutron Scattering Experiments, 1923
Poly(4-vinylpyridine)
Reaction Kinetics and the Spectroscopic and Crystallographic Nature of Certain Products from the Quaternization of Poly(4-vinylpyridine) and of Small Pyridine Molecules with Alkyl Bromides and Iodides, 1589
Poly(vinylpyrrolidone)
The Interaction of Aromatic Compounds with Poly(vinylpyrrolidone) in Aqueous Solution. Part 5.—Binding Isotherms for Phenols and *O*-Substituted Phenols, 291
Porphyrin
Decay of High-valent Manganese Porphyrins in Aqueous Solution and Catalysed Formation of Oxygen, 3215
Kinetics of the β-Hydroxy Elimination Reactions from the Protoporphyrin Iron(III)–$CHRCH_2OH$ Complexes in Aqueous Solutions. A Pulse-radiolytic Study, 3431
Positron Annihilation
Exchange of Metal Atoms in Solid Mixed-valence $Tl^{I}_{3}Tl^{III}Cl_6$. Conductivity and Positron Annihilation Investigations, 2825
Potassium
The use of TiO_2 Contaminated with Phosphorus and Potassium as a Support for V_2O_5 Catalysts in the Selective Oxidation of Toluene, 1537
Gibbs (Free) Energies of Transfer of Silver(I), Copper(I) and Potassium(I), 1955
Adsorption and Reduction of Nitrogen Monoxide by Potassium-doped Carbon, 3657
Potassium Chloride
Osmotic Coefficients of Aqueous NaCl and KCl Solutions. Temperature–Concentration Behaviour of the Bahe Lattice Model, 2167
Potentiometry
Potentiometric Monitoring of Proteins. Part 3.—Direct Potentiometry with a Copper Electrode, 1223
Polysilicate Equilibria in Concentrated Sodium Silicate Solutions, 3635
Precipitation
The Interaction of Aromatic Compounds with Poly(vinylpyrrolidone) in Aqueous Solution. Part 6.—Polymer Precipitation and Viscosity Studies with Phenols and *O*-Substituted Phenols, 635
Proflavine
Spectroscopy of Proflavine adsorbed on Clays, 281
Proline
Aqueous Solutions containing Amino Acids and Peptides. Part 24.—Free Energetic and Enthalpic Coefficients for the Interactions of some Prolyl and Sarcosyl Terminally Substituted Compounds at 25 °C, 2965
Propan-2-ol
Photocatalytic Dehydrogenation of Liquid Propan-2-ol by TiO_2. Part 1.—Kinetics, 607
The Viscosity and Structure of Solutions. Part 2.—Measurement of the *B* Coefficient of Viscosity for Alkali-metal Chlorides in Propan-1-ol–Water Mixtures at 25 and 35 °C, 2195
The Viscosity and Structure of Solutions. Part 3.—Interpretation of the Thermodynamic Activation Parameters for Propan-1-ol–Water–Electrolyte Systems, 2207
Ionic Solvation in Water–Cosolvent Mixtures. Part 12.—Free Energies of Transfer of Single Ions from Water into Water–Propan-1-ol Mixtures, 2577
Photocatalytic Dehydrogenation of Liquid Propan-2-ol by TiO_2. Part 2.—Mechanism, 2747
Free-energy Parameters for the Complexation of Metal Ions and Cryptand 222 in Propan-1-ol and for the Transfer and Partition of Cryptand 222 in Water–Alcohol Systems, 2811
Propene
Studies of Propene Oxidation over Mixed Uranium–Antimony Oxides, 3587
Proteins
Potentiometric Monitoring of Proteins. Part 3.—Direct Potentiometry with a Copper Electrode, 1223
Water Spin Relaxation in Colloidal Systems. Part 2.—^{17}O and ^{2}H Relaxation in Protein Solutions, 401
Protonation
A Comparative Study of the Protonation of *myo*-Inositol Hexakis(phosphate), 1935
Protonation of the Dianion of Tetraphenylethylene by Alcohols and Water in Acetonitrile. Case of Mixed First-order and Second-order Kinetics in the Proton Donor, 1885
Prussian Blue
Specific Quenching of the Photoexcited State of Tris(2,2′-bipyridine)ruthenium(II) by Colloidal Prussian Blue, 1637
Pulse Radiolysis
Kinetics of the β-Hydroxy Elimination Reactions from the Protoporphyrin Iron(III)–$CHRCH_2OH$ Complexes in Aqueous Solutions. A Pulse-radiolytic Study, 3431
Reactivity of the Hydrated Electron with (ω-Carboxylatoalkyl)ferricenium Zwitterions. A Radiation Chemical Study, 161
One-electron Oxidation of Iron(II) Complexes of Tryptophan and Histidine. A Pulse-Radiolysis Study, 1575
Electron Migration in Hydrated DNA and Collagen at Low Temperatures. Part 1.—Effect of Water Concentration, 2933
Electron Migration in Hydrated DNA and Collagen at Low Temperatures. Part 2.—The Effect of Additives, 2945
Pyrene
Dynamic Behaviour of Fluorescence Quenchers in Cetyltrimethylammonium Chloride Micelles, 109

Pyridine
Interlayer Adsorption of Ammonia and Pyridine in V_2O_5 Xerogel, 1597
Infrared Study of Pyridine Adsorption on Rutile and Silica-coated Rutile Immersed in Heptane, 2569
Infrared Study of Water and Pyridine Adsorption on the Surface of Anhydrous Vanadyl Pyrophosphate, 2773
Pyridine Dicarboxylate
Surface-enhanced Raman Scattering (SERS) Enhancements and Excitation Profiles for 3,5-Pyridinedicarboxylate and Dabsyl Aspartate on Colloidal Gold, 851
Pyridinium Betaine
A Nuclear Magnetic Resonance Study of the Solvatochroism of a Pyridinium Betaine, 3097
Pyronine B
A Kinetic and Equilibrium Study of the Inclusion of Pyronine B by β- and γ-Cyclodextrin, 2123
Pyronine G
Aggregation in Aqueous Solution of the Dye Pyronine G, 157
Pyrophosphate
Phosphorus and Proton Nuclear Magnetic Resonance Studies of Transition-metal Complexes of Triphosphate and Pyrophosphate in Aqueous Solution, 3149
Quaternization
Reaction Kinetics and the Spectroscopic and Crystallographic Nature of Certain Products from the Quaternization of Poly(4-Vinyl Pyridine) and of Small Pyridine Molecules with Alkyl Bromides and Iodides, 1589
Radiation Chemistry
Stochastic Models of Multi-species Kinetics in Radiation-induced Spurs, 2673
Radiation Generation of Radical Cations of Amides. An Electron Spin Resonance Study, 2833
Molecular-orbital Studies of C—H Bond Scission induced by Ionizing Radiation, 3561
Radical Cations
Radical Cations of Organic Carbonates, Trimethyl Borate and Methyl Nitrate. A Radiation–Electron Spin Resonance Study, 2367
Radiation Generation of Radical Cations of Amides. An Electron Spin Resonance Study, 2833
Radiolysis
γ-Radiolysis of Polycrystalline Magnesium Oxide, 715
Resonance Energy Transfer from Solid to Adsorbed Molecules under Radiolysis of the N_2O—MgO System, 815
The Effect of Aqueous-phase Solubility on Free-radical Exit from Latex Particles, 1979
Reactions of Hydroxyalkyl Radicals with Uracil, 2103
Raman Spectroscopy
Raman Spectroscopic Observation of Adsorbates on Ag during Electrochemical Reduction of Nitrobenzene, 45
Raman Spectroscopic Studies of Poly(oxyethylene) Chain Conformations in Non-ionic Surfactants, 597
Raney Copper
Catalysis by Amorphous Metal Alloys. Part 3.—Catalytic Activity of Raney Copper Catalysts Prepared from Amorphous $Cu_{52}Zr_{48}$ Powder, 707
Rayleigh Light Scattering
Optical Anisotropies of Alkylcyanobicyclohexyls and Related Compounds, 3367
Optical Anisotropies of Alkylcyanobiphenyls, Alkoxycyanobiphenyls and Related Compounds, 3381
Recoil Atoms
Reactions of Recoil ^{38}Cl Atoms with Dichloroethanes, 3003
Redox Reactions
Redox Behaviour of Binuclear Copper(II) Oxide Supported on Silica, 1553
Catalysis by Colloidal Gold of the Reactions between Ferricyanide and Thiosulphate Ions, 2277
Electrochemical Reduction of 2-Cyclohexen-1-ones in a Hydroethanolic Medium, 495
Reduction
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 4.—The Reduction of $H_{3+n}(PV_nMo_{12-n}O_{40})\cdot xH_2O$ and the Influence of Supports on their Properties, 3491
Electron Spin Resonance Studies of Free and Supported 12-Heteropoly Acids. Part 2.—Reduction of $H_3[PMo_{12}O_{40}]\cdot xH_2O$ and $H_4[SiMo_{12}O_{40}]\cdot xH_2O$ and Oxygen Adsorption, 273
Reflection Spectrum
Ordered Solution Structure of a Monodispersed Polystyrene Latex as studied by the Reflection Spectrum Method, 3163
Relaxation Studies
Water Spin Relaxation in Colloidal Systems. Part 1.—^{17}O and ^2H Relaxation in Dispersions of Colloidal Silica, 387
Water Spin Relaxation in Colloidal Systems. Part 2.—^{17}O and ^2H Relaxation in Protein Solutions, 401
Water Spin Relaxation in Colloidal Systems. Part 3.—Interpretation of the Low-frequency Dispersion, 415
An ^{17}O Nuclear Magnetic Resonance Relaxation-time Study of Sucrose–Water Interactions, 451
Resorcinol
Thermodynamic Parameters for Transfer of Resorcinol Monoethers from Water to Heptane and to Propylene Carbonate. Derivation and Analysis of Group Transfer Thermodynamic Paramaters, 2863
Rhenia
Surface Acidity of some Re_2O_7-containing Metathesis Catalysts. An *in situ* Fourier transform Infrared Study using Pyridine Adsorption, 2707
Rhenium
An Electron Spin Resonance Study on the Re/ZrO_2 System, 1713

Rheo-optics
Rheo-optics of Suspensions of Anisometric Particles. Part 1.—Monodisperse Ellipsoidal Particles, 457
Rheo-optics of Suspensions of Anisometric Particles. Part 2.—Polydisperse, Brownian Ellipsoidal Particles, 473
Rhodium
Paramagnetic Metal and Oxygen Species observed with Rh/γ-Al_2O_3 and Rh/ZrO_2. Dependence on the Decarbonylation Temperature of $[Rh_4(CO)_{12}]$ on Alumina and Zirconia Supports, 1795
Non-steady-state and Transient Effects in Medium-pressure Hydrogenation of Carbon Monoxide over Rhodium Catalysts, 431
Ring–Disc Electrode
The Effect of Heat Treatment on Group VIIIB Porphyrins as Electrocatalysts in the Cathodic Reduction of Oxygen, 1561
Trace-metal Analysis in Hydroponic Solutions, 1071
Roccellin
Complexation of Roccellin by β- and γ-Cyclodextrin, 2333
Ruthenium
Chemisorption and Catalysis by Metal Clusters: Characterisation and Chemisorption. Properties of $Ru_3(CO)_{12}$ and $H_4RU_4(CO)_{12}$ Supported on Alumina, Silica and Titania, 189
Hydrogenolysis of Alkanes. Part 3.—Hydrogenolysis of n-Hexane and Methylcyclopentane over variously treated Ru/TiO_2 Catalysts, 1985
Chemisorption and Catalysis by Metal Clusters. Hydrogenation of Ethene and Hydrogenolysis of Ethane catalysed by Supported Ruthenium Clusters derived from $Ru_3(CO)_{12}$ and from $H_4Ru_4(CO)_{12}$, 2719
Adsorption and Decomposition of Ethylene and Acetylene on Flat Ru(001) and Stepped Ru(1,1,10) Surfaces, 3197
Specific Quenching of the Photoexcited State of Tris(2,2′-bipyridine)ruthenium(II) by Colloidal Prussian Blue, 1637
Electrochemistry and Stability Studies of Oxo-bridged Dinuclear Ruthenium(III) Complexes for Water Oxidation, 3515
Rutile
Infrared Study of Pyridine Adsorption on Rutile and Silica-coated Rutile Immersed in Heptane, 2569
Salicylate
Ion-selective Electrodes based on Siderophores, 1187
Sarcosine
Aqueous Solutions containing Amino Acids and Peptides. Part 24.—Free Energetic and Enthalpic Coefficients for the Interactions of some Prolyl and Sarcosyl Terminally Substituted Compounds at 25 °C, 2965
Scanning Electron Microscopy
Thermal Decomposition of Solid Sodium Bicarbonate, 3709
Self-aggregation
The Hydrophobic Behaviour of Orange IV in Water and in Aqueous Electrolyte Solutions, 2377
Semiconducting Metal Oxides
Surface-charging Effects in the X-Ray Photoelectron Spectra of some Semiconducting Oxides, 1721
Siderophores
Ion-selective Electrodes based on Siderophores, 1187
Silane
Modification of H-Mordenite with Silane and Diborane. A Comparative Study of the Reaction Parameters, 963
Silica
Thermodynamics of Adsorption of *O*-n-Dodecylpentaethylene Glycol from Aqueous Solution on to Carbon and Silica at 313 K, 953
The Adsorption of Methanol on Hydrophilic, Hydrophobic and Mixed Silicas, 1351
Redox Behaviour of Binuclear Copper(II) Oxide Supported on Silica, 1553
Thermal Desorption and Infrared Studies of Butylamine adsorbed on SiO_2, Al_2O_3 and CaO, 3391
Water Spin Relaxation in Colloidal Systems. Part 1.—^{17}O and ^2H Relaxation in Dispersions of Colloidal Silica, 387
Silica–Alumina
Estimation of Acidic and Physical Properties of Solid Acids Based on Adsorption of Basic Molecules in Non-polar Solvents, 1307
Surface Acidity of some Re_2O_7-containing Metathesis Catalysts. An *in situ* Fourier transform Infrared Study using Pyridine Adsorption, 2707
Silica Gel
High-resolution Solid-state Magic Angle Spinning Nuclear Magnetic Resonance Investigations of Surface Hydroxy Groups on Modified Silica Gel, 1879
Neutron Scattering of Supercooled Water in Silica Gels, 3447
Silicalite
Effect of Alkalinity on the Crystallisation of Silicalite-1 Precursors, 785
Crystallisation of Silicate-1 Precursors in the Amine–$(C_3H_7)_4NBr$–SiO_2–H_2O System, 801
Silicates
Structural Aspects of Metal-oxide-pillared Sheet Silicates. An Investigation by Magic-angle-spinning Nuclear Magnetic Resonance, Fourier-transform Infrared Spectroscopy and Powder X-Ray Diffractometry, 3081
Silicon
A High-molecular Solid-state Nuclear Magnetic Resonance Study of the Ordering of Silicon and Aluminium in Synthetic Mazzite (Zeolite Omega), 569
Silicon Tetrachloride
Zeolites treated with Silicon Tetrachloride Vapour. Part 1.—Preparation and Characterisation, 1449

Silicon Tetrachloride (*cont.*)
Zeolites treated with Silicon Tetrachloride Vapour. Part 3.—Atom–Atom Potential Calculations for the Adsorption of Xenon, 2851
Zeolites treated with Silicon Tetrachloride Vapour. Part 2.—Sorption Studies, 3569
Silver
Raman Spectroscopic Observation of Adsorbates on Ag during Electrochemical Reduction of Nitrobenzene, 45
Gibbs (Free) Energies of Transfer of Silver(I), Copper(I) and Potassium(I), 1955
Catalytic Reactions on Metal-supported Semiconductors. Oxidation of CO over ZnO Films on Silver, 2025
Metal Particles supported by Porous Glass, 2515
Electron Spin Resonance Evidence for the Structure of Ag^{II} and Ag^{O} Solvates in Acetonitrile, 2729
Electron Spectroscopic Studies of Formic Acid Absorption and Oxidation on Cu and Ag dosed with Barium, 1657
Small-angle Neutron Scattering
Small-angle Neutron Scattering Studies of Microemulsions Stabilised by Aerosol-OT. Part 3.—The Effect of Additives on Phase Stability and Droplet Structure, 2411
Smithsonite
Spectroscopic Investigation of Sulphidation of Zinc and Lead Carbonates, 2043
Sodium Bicarbonate
Thermal Decomposition of Solid Sodium Bicarbonate, 3709
Sodium Chloride
Interfacial Tension Minima in Oil–Water–Surfactant Systems. Effects of Alkane Chain Length and Presence of n-Alkanols in Systems containing Aerosol OT, 1755
Osmotic Coefficients of Aqueous NaCl and KCl Solutions. Temperature–Concentration Behaviour of the Bahe Lattice Model, 2167
Sodium Compounds
Catalytic Properties of Magnesium Oxides Doped with Sodium Compounds, 1357
Sodium Dodecyl Sulphate
Mixed Adsorption of a Non-ionic and an Anionic Surfactant at the Carbon–Aqueous Solution Interface, 1805
Micellar Inhibition of the Aquation of Tris-(3,4,7,8-tetramethyl-1,10-phenanthroline)iron(II) by Sodium Dodecyl Sulphate in Aqueous Acid Medium, 2011
Sodium Hydrogen Sulphate
Multicomponent Diffusion of Double Salts. Sodium Hydrogen Sulphate in Aqueous Solution, 247
Sodium Iodide
Calorimetric Studies of NaI Solutions in Binary Organic Isodielectric Mixtures, 513
Sodium Octanoate
A Comparison of the Conformation of Micellar and Non-micellar Sodium Octanoate and Octanoic Acid using ^{13}C–^{1}H and ^{1}H–^{1}H Vicinal Spin–Spin Coupling Constants, 255
Sodium Silicate
Polysilicate Equilibria in Concentrated Sodium Silicate Solutions, 3635
Sodium Sulphate
Viscosity of Na_2SO_4 and $MgSO_4$ Solutions in Ethanol–Water Mixtures at 15, 25 and 35 °C, 3307
Solubilisation
Solubilisation of Two-component Oil Mixtures by Micellar Surfactant Solutions, 3205
Solubility
Solubilities of Salts and Kinetics of Reaction between Hydroxide Ions and Iron(II)–Di-imine Complexes in Water–Methanol Mixtures. Derivation of Single-ion Transfer Chemical Potentials and their Application to Analysis of Solvent Effects of Kinetic Parameters, 1471
Solvent Effects on the Thermodynamics of Aquocobalamin Chloride and Model Compounds in Dioxane–Water Mixtures, 3331
Application of the Flory–Huggins Theory to the Solubility of Solids in Glyceryl Trioleate, 243
Association of $Co(sep)^{3+}$ Ions with $S_2O_8^{2-}$ Ions. Spectrophotometric, Circular Dichroism and Solubility Measurements, 1429
Interactions between Metal-complex Ions and Water. Part 3.—Entropies of Solution and Heat Capacity Changes of Metal-complex Ions in Water at 25 °C, 2843
Solvation
Cross Enthalpic Pair Interaction Coefficients with Water in *N*,*N*-Dimethylformamide and with *N*,*N*-Dimethylformamide in Water, 53
The Hydration Entropies of Ions and their Effects on the Structure of Water, 233
Conformation and Solvation. Hydrophobic Hydration and Preferential Solvation of some Monosaccharides in Mixtures of Water and *N*,*N*-Dimethylformamide, 933
Stereoassociation of Poly(Methyl Methacrylate). Relationship between a Synergic Effect in the Solution Power and a Change in the Solvent Complexing Capacity, 1333
Application of the Competitive Preferential Solvation Theory to Ion–Molecule Interactions, 1789
Solvent Structural Constant and Solvation Behaviour Applied to the Description of Aqueous Electrolytes at 25–300 °C, 2283
Thermodynamic Study of Organic Compounds in Octan-1-ol. Processes of Transfer from Gas and from Dilute Aqueous Solution, 2547
A Nuclear Magnetic Resonance Study of the Solvatochroism of a Pyridinium Betaine, 3097
The Thermodynamics of Solvation of Ions. Part 1.—The Heat Capacity of Hydration at 298.15 K, 3255
Solvatochroism
A Nuclear Magnetic Resonance Study of the Solvatochroism of a Pyridinium Betaine, 3097
Solvent Effects
Solubilities of Salts and Kinetics of Reaction between Hydroxide Ions and Iron(II)–Di-imine Complexes in Water–Methanol Mixtures. Derivation of Single-ion Transfer Chemical Potentials and their Application to Analysis of Solvent Effects of Kinetic Parameters, 1471

Solvent Effects (*cont.*)
The Solvent Effect on the Electro-oxidation of 1,4-Phenylenediamine. The Influence of the Solvent Reorientation Dynamics on the One-electron Transfer Rate, 339
The Importance of the Electrostatic Interaction in Condensed-phase Photoinduced Electron Transfer, 509
Solvolysis
Kinetics of the Solvolysis of the *cis*-Chlorothiocyanatobis(1,2-diaminoethane) cobalt(III) Ion in Water–t-Butyl Alcohol Mixtures, 1643
Sorption
Zeolites treated with Silicon Tetrachloride Vapour. Part 2.—Sorption Studies, 3569
Spectrophotometry
Aggregation in Aqueous Solution of the Dye Pyronine G, 157
Spectrophotometric and Calorimetric Study of the Gallium(III) Monothiocyanate Complex in Dimethyl Sulphoxide Solutions, 1381
Association of $Co(sep)^{3+}$ Ions with $S_2O_3^{2-}$ Ions. Spectrophotometric, Circular Dichroism and Solubility Measurements, 1429
Ionic Solvation in Water–Cosolvent Mixtures. Part 12.—Free Energies of Transfer of Single Ions from Water into Water–Propan-1-ol Mixtures, 2577
Spur Kinetics
Stochastic Models of Multi-species Kinetics in Radiation-induced Spurs, 2673
Stability Constants
Stability of Monochloride Complexes of some Divalent Transition-metal Cations in *N*,*N*-Dimethylformamide, 1745
Free-energy Parameters for the Complexation of Metal Ions and Cryptand 222 in Propan-1-ol and for the Transfer and Partition of Cryptand 222 in Water–Alcohol Systems, 2811
Stereoassociation
Stereoassociation of Poly(Methyl Methacrylate). Relationship between a Synergic Effect in the Solution Power and a Change in the Solvent Complexing Capacity, 1333
Stochastic Models
Stochastic Models of Multi-species Kinetics in Radiation-induced Spurs, 2673
Sublimation
Thermal Properties, Thermochemistry and Kinetics of the Thermal Dissociation of Hydrochlorides of some Mononitrogen Aromatic Bases, 3069
Sulphidation
Spectroscopic Investigation of Sulphidation of Zinc and Lead Carbonates, 2043
Sulphite
Kinetics and Mechanism of the Cobalt-catalysed Reaction of Oxygen and Sulphite at Very Low Concentrations, 869
Sulphur Dioxide
Electron Spin Resonance Study of the Radicals formed by Ultraviolet Irradiation of TiO_2 in the Presence of Sulphur Dioxide and Oxygen, 739
Analytical Applications of Gas Membrane Electrodes, 1105
Superacid Sites
Superacid Sites in Zeolite H-Mordenite, 2151
Supported Catalysts
$Re_2O_7/Al_2O_3 \cdot B_2O_3$ Metathesis Catalysts, 1945
Hydrogenation of Carbon Dioxide and Carbon Monoxide over Supported Platinum Catalysts, 1681
Surface Chemistry
Electron Spectroscopic Studies of Formic Acid Absorption and Oxidation on Cu and Ag dosed with Barium, 1657
Surface Decomposition
Adsorption, Desorption and Surface Decomposition of Formaldehyde and Acetaldehyde on Metal Films Nickel, Palladium and Aluminium, 2221
Surface-enhanced Raman Scattering
Surface-enhanced Raman Scattering (SERS) Enhancements and Excitation Profiles for 3,5-Pyridinedicarboxylate and Dabsyl Aspartate on Colloidal Gold, 851
Surface Tension
General Formulae for the Curvature Dependence of Droplets and Bubbles, 1413
The Curvature Dependence of Surface Tension of Small Droplets, 1421
The Hydrophobic Behaviour of Orange IV in Water and in Aqueous Electrolyte Solutions, 2377
Micellisation and Surface Properties of Oligo(oxyethylene) Methyl-n-alkyl and di-n-Alkyl Ethers, 1865
Surfactant
The Partitioning of Solutes between Water-in-Oil Microemulsions and Conjugate Aqueous Phases, 2651
Direct Measurement of Temperature-dependent Interactions between Non-ionic Surfactant Layers, 2735
Solubilisation of Two-component Oil Mixtures by Micellar Surfactant Solutions, 3205
Interfacial Tension Minima in Oil–Water Surfactant Systems. Behaviour of Alkane–Aqueous NaCl Systems containing Aerosol OT, 125
Raman Spectroscopic Studies of Poly(oxyethylene) Chain Conformations in Non-ionic Surfactants, 597
Interfacial Tension Minima in Oil–Water–Surfactant Systems. Effects of Alkane Chain Length and Presence of n-Alkanols in Systems containing Aerosol OT, 1755
Mixed Adsorption of a Non-ionic and an Anionic Surfactant at the Carbon–Aqueous Solution Interface, 1805
Association Characteristics of Synthetic Non-ionic Surfactants in Aqueous Solution, 1903
A Quasi-elastic Neutron Scattering Study of Water-in-oil Microemulsions stabilised by Aerosol-OT. Effect of Additives including Solubilised Protein on Molecular Motions, 2311

Surfactant (*cont.*)
Interfacial Tension Minima in Oil–Water–Surfactant Systems. Systems containing Pure Non-ionic Surfactants, Alkanes and Inorganic Salts, 2951
Phase Equilibria in Model Mixtures of Spherical Molecules of Different Sizes, 3461
Tannic Acid
The Effect of Tannic Acid on the Electrical Properties of the Interface and the Non-linear Streaming Potential of Cellulose in a Cationic Dye Solution, 329
Temperature-jump Spectrophotometry
A Kinetic and Equilibrium Study of the Inclusion of Pyronine B by β- and γ-Cyclodextrin, 2123
Temperature-programmed Desorption
Adsorption and Desorption Kinetics of Oxygen on Tin–Antimony Oxide Catalyst by Quasi-constant Coverage Methods, 3601
Ternary Mixtures
Total and Preferential Sorption in Polar Ternary Systems, 1321
Tetrahydrofuran
Interaction Parameters and the Equilibrium Cationic Polymerization of Tetrahydrofuran in Benzene, 899
Reactivity of Solvated Electrons in Tetrahydrofuran, 2521
Tetrahydroxyborate
An ^{11}B Nuclear Magnetic Resonance Study of the Reaction of the Tetrahydroxyborate Ion with Polyhydroxy Compounds, 3407
***N,N,N′,N′*-Tetramethyl-*p*-phenylenediamine**
A Fast Kinetic Study of the Formation and Decay of *N,N,N′,N′*-Tetramethyl-*p*-phenylenediamine Radical Cation in Aqueous Solution, 359
Tetramethylbutane
Arrhenius Parameters for the Reaction $HO_2 + C_2H_4 \rightarrow C_2H_3 + H_2O_2$ over the Temperature Range 400–500 °C, 89
Tetraphenylethylene
Protonation of the Dianion of Tetraphenylethylene by Alcohols and Water in Acetonitrile. Case of Mixed First-order and Second-order Kinetics in the Proton Donor, 1885
Tetrapyrroles
Semiconducting Tetrapyrrole Pigment Gas Sensors, 1127
Thallium Chloride
Exchange of Metal Atoms in Solid Mixed-valence $Tl^{I}_{3}Tl^{III}Cl_6$. Conductivity and Positron Annihilation Investigations, 2825
Thermal Analysis
Surface Reduction in Low-temperature Formation of Nickel Oxide from Different Nickel Salts. Thermal Analysis, Surface Area, Electron Microscopy and Infrared Studies, 747
Thermal Conductivity
Thermal Conductivity of Argon, Nitrogen and Carbon Dioxide at Elevated Temperatures and Pressures, 2235
Thermal Decomposition
Thermal Decomposition of Solid Sodium Bicarbonate, 3709
Thermal Properties, Thermochemistry and Kinetics of the Thermal Dissociation of Hydrochlorides of some Mononitrogen Aromatic Bases, 3069
Thermal Desorption
Thermal Desorption and Infrared Studies of Primary Aliphatic Amines adsorbed on Haematite (α-Fe_2O_3), 2505
Thermal Desorption and Infrared Studies of Butylamine adsorbed on SiO_2, Al_2O_3 and CaO, 3391
Thermodynamics
Thermodynamics of Adsorption from Binary Liquid Mixtures on Heterogeneous Adsorbents, 831
Thermodynamics of Adsorption of *O*-n-Dodecylpentaethylene Glycol from Aqueous Solution on to Carbon and Silica at 313 K, 953
Entropies of Tetrahedral M—Phenyl Species, 993
Mechanism of Inclusion-compound Formation for Binding of Organic Dyes, Ions and Surfactants to α-Cyclodextrin Studied by Kinetic Methods Based on Competition Experiments, 1271
Thermodynamics of Three Toluene-containing Mixtures Generalized van der Waals and Ising-like Models, 1839
Thermodynamic Properties of Binary Alcohol–Hydrocarbon Systems, 2435
Thermodynamic Study of Organic Compounds in Octan-1-ol. Processes of Transfer from Gas and from Dilute Aqueous Solution, 2547
Remarks on Dependence on Temperature 'at Constant Volume', 2557
Special Features of Equilibrium Constants that are based on Volume Fractions, 2565
Interactions between Metal-complex Ions and Water. Part 3.—Entropies of Solution and Heat Capacity Changes of Metal-complex Ions in Water at 25 °C, 2843
Standard Thermodynamic Functions of the Gaseous Actinyl Ions MO_2^{2+} and for their Hydration, 2873
The Thermodynamics of Solvation of Ions. Part 1.—The Heat Capacity of Hydration at 298.15 K, 3255
Thermodynamic Parameters of Electrolyte Solutions in Nitromethane, 3275
Structure of Water in Solutions in the Subcooled Region from Freezing-point Depressions, 1663
Solvent Effects on the Thermodynamics of Aquocobalamin Chloride and Model Compounds in Dioxane–Water Mixtures, 3331
Phase Equilibria in Model Mixtures of Spherical Molecules of Different Sizes, 3461
Excess Pressures for Aqueous Solutions, 3681
Alkali-metal Cryptates in Nitromethane. Thermodynamic Parameters for Complex Formation and for Transfer among Different Solvents, 349
A New Analytical Solution of the Ternary Gibbs–Duhem Equation, 375
Thioglycolic Acid
Dissolution of Cobalt Ferrites by Thioglycolic Acid, 2345

Thiosulphate
Catalysis by Colloidal Gold of the Reactions between Ferricyanide and Thiosulphate Ions, 2277
Thiourea
Diffusion Phenomena and Metal Complex Formation Equilibria. Part 1.—Cd^{II}–Thiourea Systems in Aqueous and Mixed-solvent Media, 3415
Titanium Dioxide
Photocatalytic Dehydrogenation of Liquid Propan-2-ol by TiO_2. Part 1.—Kinetics, 607
Electron Spin Resonance Study of the Radicals formed by Ultraviolet Irradiation of TiO_2 in the Presence of Sulphur Dioxide and Oxygen, 739
The use of TiO_2 Contaminated with Phosphorus and Potassium as a Support for V_2O_5 Catalysts in the Selective Oxidation of Toluene, 1537
Hydrogenolysis of Alkanes. Part 3.—Hydrogenolysis of n-Hexane and Methylcyclopentane over variously treated Ru/TiO_2 Catalysts, 1985
Photocatalytic Dehydrogenation of Liquid Propan-2-ol by TiO_2. Part 2.—Mechanism, 2747
Electron-microscopic Observation of Photodeposited Pt on TiO_2 Particles in Relation to Photocatalytic Activity, 527
Toluene
Activity Measurements and Spectroscopic Studies of the Catalytic Oxidation of Toluene over V_2O_5/Al_2O_3-C Catalysis, 767
The use of TiO_2 Contaminated with Phosphorus and Potassium as a Support for V_2O_5 Catalysts in the Selective Oxidation of Toluene, 1537
Thermodynamics of Three Toluene-containing Mixtures Generalized van der Waals and Ising-like Models, 1839
Liquid Structure and Second-order Mixing Functions for Benzene, Toluene and *p*-Xylene with n-Alkanes, 2977
Trace-metal Analysis
Trace-metal Analysis in Hydroponic Solutions, 1071
Transfer Enthalpy
Characterization of Anion Solvation in *N*-Methylacetamide Transfer Enthalpies of Anions and the Reaction Rates of Ethyl Iodide with Bromide Ion in *N*-Methylacetamide–Acetonitrile and *N*-Methylacetamide–*N*,*N*-Dimethylacetamide Mixtures, 2141
Solvent Effects on the Thermodynamics of Aquocobalamin Chloride and Model Compounds in Dioxane–Water Mixtures, 3331
Transfer Thermodynamics
Thermodynamic Parameters for Transfer of Resorcinol Monoethers from Water to Heptane and to Propylene Carbonate. Derivation and Analysis of Group Transfer Thermodynamic Paramaters, 2863
Transition-metal Cations
Stability of Monochloride Complexes of some Divalent Transition-metal Cations in *N*,*N*-Dimethylformamide, 1745
Transmitted Light Spectrum
Transmitted Light Spectrum Measurements. A New and Convenient Technique for the Study of the Ordered Structure of Monodispersed Polystyrene Latex in Solution and Film, 3175
Ordered Solution Structure of a Monodispersed Polystyrene Latex as studied by the Transmitted Light Spectrum Method, 3185
Transport Phenomena
Transport Numbers of Dilute Aqueous Cadmium Chloride Solutions at 298.15 K, 2763
Protonic and Ionic Conduction in Lysozyme. Hydration and Field-dependent Effects, 143
On the Fundamental Concepts underlying Henry-law Adsorption and Adsorbed Gas Transport in Porous Solids, 2531
Trimethyl Borate
Radical Cations of Organic Carbonates, Trimethyl Borate and Methyl Nitrate. A Radiation–Electron Spin Resonance Study, 2367
Triphenylmethylarsonium Iodide
Electron Capture in Single Crystals of Triphenylmethylarsonium Iodide. Electron Spin Resonance Detection of Ph_3AsI, 521
Triphosphate
Phosphorus and Proton Nuclear Magnetic Resonance Studies of Transition-metal Complexes of Triphosphate and Pyrophosphate in Aqueous Solution, 3149
Tryptophan
One-electron Oxidation of Iron(II) Complexes of Tryptophan and Histidine. A Pulse-Radiolysis Study, 1575
Two-component Mixtures
Solubilisation of Two-component Oil Mixtures by Micellar Surfactant Solutions, 3205
Two-phase System
The Partitioning of Solutes between Water-in-Oil Microemulsions and Conjugate Aqueous Phases, 2651
Uracil
Reactions of Hydroxyalkyl Radicals with Uracil, 2103
Uranium Oxide
Surface Characterisation of β-U_3O_7 Using X-ray Photoelectron Spectroscopy, 1367
Studies of Propene Oxidation over Mixed Uranium–Antimony Oxides, 3587
Vanadium Oxide
Structural Relationships in the Reduction of the Vanadia–Molybdena Intermediate Compound, 1673
Activity and Selectivity in Catalytic Reactions of Buta-1,3-diene and But-1-ene on Supported Vanadium Oxides, 13
Formation of an Epoxide Intermediate in the Photo-oxidation of Alkenes over Silica-supported Vanadium Oxide, 35
Interlayer Adsorption of Ammonia and Pyridine in V_2O_5 Xerogel, 1597
Vanadyl Pyrophosphate
Infrared Study of Water and Pyridine Adsorption on the Surface of Anhydrous Vanadyl Pyrophosphate, 2773

Vapour–Liquid Equilibria
Thermodynamics of Three Toluene-containing Mixtures Generalized van der Waals and Ising-like Models, 1839
Vapour-pressure Measurements
Solution Properties of Water in Molten $AgNO_3$–$LiNO_3$ Mixtures as derived from Vapour-pressure Measurements on $AgNO_3$–$LiNO_3$–H_2O Melts, 1853
Vesicles
Kinetics of $O_2(^1\Delta_g)$ Photo-oxidation Reactions in Egg-yolk Lecithin Vesicles, 1627
Vibration Analysis
Normal Coordinate Analysis of Molecules adsorbed on Zeolite Surfaces. Part 1.—Cyclopropane adsorbed in Sodium Faujasites and Mordenites, 3401
Viscometry
Interfacial Tension Minima in Oil–Water Surfactant Systems. Behaviour of Alkane–Aqueous NaCl Systems containing Aerosol OT, 125
Stereoassociation of Poly(Methyl Methacrylate). Relationship between a Synergic Effect in the Solution Power and a Change in the Solvent Complexing Capacity, 1333
Viscosity
The Interaction of Aromatic Compounds with Poly(vinylpyrrolidone) in Aqueous Solution. Part 6.—Polymer Precipitation and Viscosity Studies with Phenols and *O*-Substituted Phenols, 635
The Viscosity and Structure of Solutions. Part 2.—Measurement of the *B* Coefficient of Viscosity for Alkali-metal Chlorides in Propan-1-ol–Water Mixtures at 25 and 35 °C, 2195
The Viscosity and Structure of Solutions. Part 3.—Interpretation of the Thermodynamic Activation Parameters for Propan-1-ol–Water–Electrolyte Systems, 2207
Osmosis and Reverse Osmosis. Part 1.—The Frictional Coefficients in a General Transport Equation, 3289
Viscosity of Na_2SO_4 and $MgSO_4$ Solutions in Ethanol–Water Mixtures at 15, 25 and 35 °C, 3307
The Viscosity and Structure of Solutions. Part 2.—Measurement of the *B* Coefficient of Viscosity for Alkali-metal Chlorides in Propan-1-ol–Water Mixtures at 25 and 35 °C, 2195
The Viscosity and Structure of Solutions. Part 1.—A New Theory of the Jones–Dole *B*-Coefficient and the Related Activation Parameters: Application to Aqueous Solutions, 563
Voltammetry
Convolution of Voltammograms as a Method of Chemical Analysis, 1099
Volumetric Studies
Volumetric Investigation of the Hydrotropic Action of Aqueous Sodium Propionate Solutions on Pentanol at 298 K, 77
Vycor Glass
Metal Particles supported by Porous Glass, 2515
Water
The Hydration Entropies of Ions and their Effects on the Structure of Water, 233
Solution Properties of Water in Molten $AgNO_3$–$LiNO_3$ Mixtures as derived from Vapour-pressure Measurements on $AgNO_3$–$LiNO_3$–H_2O Melts, 1853
Deuterium Longitudinal Nuclear Magnetic Relaxation of Heavy Water in Alkylammonium Chloride Solution. Effect of Deuterium Exchanges between Water and Polar Heads, 2185
Ionic Solvation in Water–Cosolvent Mixtures. Part 12.—Free Energies of Transfer of Single Ions from Water into Water–Propan-1-ol Mixtures, 2577
Structure of Water in Solutions in the Subcooled Region from Freezing-point Depressions, 1663
Neutron Scattering of Supercooled Water in Silica Gels, 3447
Water Spin Relaxation in Colloidal Systems. Part 1.—^{17}O and ^2H Relaxation in Dispersions of Colloidal Silica, 387
Water Spin Relaxation in Colloidal Systems. Part 2.—^{17}O and ^2H Relaxation in Protein Solutions, 401
Water Spin Relaxation in Colloidal Systems. Part 3.—Interpretation of the Low-frequency Dispersion, 415
Concentration Polarization and Water Dissociation in Ion-exchange Membrane Electrodialysis, 2065
The Partitioning of Solutes between Water-in-Oil Microemulsions and Conjugate Aqueous Phases, 2651
Solubilities of Salts and Kinetics of Reaction between Hydroxide Ions and Iron(II)–Di-imine Complexes in Water–Methanol Mixtures. Derivation of Single-ion Transfer Chemical Potentials and their Application to Analysis of Solvent Effects of Kinetic Parameters, 1471
Electrochemistry and Stability Studies of Oxo-bridged Dinuclear Ruthenium(III) Complexes for Water Oxidation, 3515
Water-glass
Polysilicate Equilibria in Concentrated Sodium Silicate Solutions, 3635
X-Ray Crystallography
Electron Microscopy of Pt, Pd and Ni Particles in a NaX Zeolite Matrix, 205
Reaction Kinetics and the Spectroscopic and Crystallographic Nature of Certain Products from the Quaternization of Poly(4-Vinyl Pyridine) and of Small Pyridine Molecules with Alkyl Bromides and Iodides, 1589
X-Ray Diffraction
Structural Relationships in the Reduction of the Vanadia–Molybdena Intermediate Compound, 1673
Characterization of Clays and Clay–Organic Systems. Cation Diffusion and Dehydroxylation, 545
X-Ray Diffractometry
Structural Aspects of Metal-oxide-pillared Sheet Silicates. An Investigation by Magic-angle-spinning Nuclear Magnetic

X-Ray Diffractometry (*cont.*)
Resonance, Fourier-transform Infrared Spectroscopy and Powder X-Ray Diffractometry, 3081
X-Ray Photoelectron Spectroscopy
Surface Characterisation of β-U_3O_7 Using X-ray Photoelectron Spectroscopy, 1367
Surface-charging Effects in the X-Ray Photoelectron Spectra of some Semiconducting Oxides, 1721
Spectroscopic Investigation of Sulphidation of Zinc and Lead Carbonates, 2043
Correlation between Hydrodesulphurization Activity and Reducibility of Unsupported MoS_2-based Catalysts promoted by Group VIII Metals, 2423
Xenon
Zeolites treated with Silicon Tetrachloride Vapour. Part 3.—Atom–Atom Potential Calculations for the Adsorption of Xenon, 2851
***o*-Xylene**
Thermodynamics of Three Toluene-containing Mixtures Generalized van der Waals and Ising-like Models, 1839
Liquid Structure and Second-order Mixing Functions for Benzene, Toluene and *p*-Xylene with n-Alkanes, 2977
Zeolite
Adsorption and Decomposition of $Mo(CO)_6$ of Zeolite NaY, 2887
Cooperative Effects in Heterogeneous Catalysis. Part 1.—Phenomenology of the Dynamics of Carbon Monoxide Oxidation on Palladium embedded in a Zeolite Matrix, 3315
Zeolites
Electron Microscopy of Pt, Pd and Ni Particles in a NaX Zeolite Matrix, 205
Influence of Cocations on the Location and Coordination Geometry of Cu^{2+} in M^+A Zeolites (M^+ = Na, K, Tl, Rb, Cs, NH_4 and CH_3NH_3). An Electron Spin Resonance and Electron Spin–Echo Modulation Spectroscopic Study, 213
A High-molecular Solid-state Nuclear Magnetic Resonance Study of the Ordering of Silicon and Aluminium in Synthetic Mazzite (Zeolite Omega), 569
Modification of H-Mordenite with Silane and Diborane. A Comparative Study of the Reaction Parameters, 963
Regeneration of Pentasil Zeolite Catalysts using Ozone and Oxygen, 1007
Zeolites treated with Silicon Tetrachloride Vapour. Part 1.—Preparation and Characterisation, 1449
Superacid Sites in Zeolite H-Mordenite, 2151
Metal Particles supported by Porous Glass, 2515
Distribution of Silicon-to-Aluminium Ratios in Zeolite ZSM-5, 2645
The Effect of Acid Treatment on the Properties of Dealuminated Y Zeolite, 2817
Zeolites treated with Silicon Tetrachloride Vapour. Part 3.—Atom–Atom Potential Calculations for the Adsorption of Xenon, 2851
^{13}C Nuclear Magnetic Resonance Investigations of Carbon Monoxide in Decationated Zeolites of Type Y, 3053
Normal Coordinate Analysis of Molecules adsorbed on Zeolite Surfaces. Part 1.—Cyclopropane adsorbed in Sodium Faujasites and Mordenites, 3401
The Dielectric Properties of Zeolites in Variable Temperature and Humidity, 3535
The Time-domain Response of Humid Zeolites, 3553
Zeolites treated with Silicon Tetrachloride Vapour. Part 2.—Sorption Studies, 3569
Potentials of Ion-exchanged Synthetic Zeolite–Polymer Membranes, 3647
Determination of Isotherms and Initial Heat of Adsorption of CO_2 and N_2O in Four A Zeolites from Infrared Measurements, 365
Zinc Oxide
Catalytic Reactions on Metal-supported Semiconductors. Oxidation of CO over ZnO Films on Silver, 2025
Zirconia
An Electron Spin Resonance Study on the Re/ZrO_2 System, 1713
Paramagnetic Metal and Oxygen Species observed with Rh/γ-Al_2O_3 and Rh/ZrO_2. Dependence on the Decarbonylation Temperature of $[Rh_4(CO)_{12}]$ on Alumina and Zirconia Supports, 1795
Zwitterions
Reactivity of the Hydrated Electron with (ω-Carboxylatoalkyl)ferricenium Zwitterions. A Radiation Chemical Study, 161

Cumulative Author Index 1986

Abraham, M. H., 3255, 3501
Abu-Gharib, E.-E. A., 1471
Abuladze, N. A., 2481
Adams, D. M., 1020
Adams, M., 1979
Aicart, E., 2977
Aida, M., 1619
Aika, K-i., 2269
Akanni, M. S., 3357
Akratopulu, K. Ch., 3697
Al-Hakim, M., 1575
Albery, W. J., 1033
Allen, G. C., 1367
Alwis, U. de, 1265
Amiya, S., 3141
Ammann, D., 1179
Anderson, J. A., 1911
Anderson, M. W., 569, 1449, 2851, 3569
Andersson, S. L. T., 767, 1537
André, O., 2423
Antoniou, A. A., 483
Appleyard, I. P., 2817
Araya, P., 1351, 2473
Atherton, N. M., 3042
Attwood, D., 1903
Augustine, R. L., 3025
Avent, A. G., 1589
Aveyard, R., 125, 1031, 1755, 2951
Ayyoob, M., 1657
Bacchus-Montabonel, M-C., 3601
Balasubramanian, K., 2665
Baldwin, R. R., 89
Balk, R. W., 933
Ball, M. C., 3709
Ball, R. C., 3233
Balt, S., 3331
Barford, W., 3233
Barone, G., 2089
Barouch, E., 2801
Barratt, D. G., 3501
Bartlett, J. R., 597
Bartlett, P. N., 1033
Battisti, A. De, 2481
Baur, J., 1081
Becker, K. A., 2151
Beezer, A. E., 2863, 2929
Belton, P. S., 451
Benecke, J. I., 1945
Bennett, C. O., 2155
Berei, K., 3003
Berezin, I. V., 319
Bernstein, T., 1879
Berroa de Ponce, H., 2811
Berry, F. J., 1023
Berti, P., 2547
Bhattacharyya, S. N., 2103
Bieth, H., 1935
Binks, B. P., 125, 1031, 1755
Biswas, P. K., 1973
Blackburn, G. M., 2965
Blake, P. G., 723
Blandamer, M. J., 1022, 1471, 3681, 2989
Blesa, M. A., 2345
Bloemendal, M., 53
Bloor, D., 2111
Błażejowski, J., 3069
B.Nagy, O., 1789
Boelhouwer, C., 1945, 2707
Bolton, J. R., 3625
Bond, G. C., 1985, 3043
Booth, B. L., 2007
Booth, C., 1865, 3717
Boucher, E. A., 1589
Bozonnet-Frenot, M-P., 2185
Brereton, I. M., 1999
Brett, C. M. A., 1071
Brigandi, P. W., 1032
Brillas, E., 495, 1781
Brown, O. R., 3045
Bruckenstein, S., 1105
Buck, R. P., 1169
Bui, V. T., 899
Burch, R., 1985
Burgess, J., 1471, 2989, 3681
Busca, G., 3019
Cabani, S., 2547
Cameron, P., 1389
Campos, A., 2781
Canet, D., 2185
Carley, A. F., 723
Carpenter, T. A., 545
Carroll, B. J., 3205
Casal, B., 1597
Cass, A. E. G., 1033
Castro, V. Di, 723
Castronuovo, G., 2089
Celda, B., 2781
Cenens, J., 281
Cesteros, L. C., 1321
Chabor, A., 3293
Champion, J. V., 439
Chang, C. D., 1032
Chao, K-J., 2645
Chapman, D., 3048
Chiou, C. T., 243
Chitale, S. M., 663
Christensen, P. A., 3215
Christenson, H. K., 2735
Chung, J. S., 2155
Claesson, P. M., 2735
Clark, B., 1471
Clark, S., 125
Clarke, R. J., 2333
Clewley, J. D., 2589
Clifford, A. A., 2235
Coates, J. H., 2123, 2333
Cochran, S. J., 1721
Cohen de Lara, E., 365
Cohen, H., 2627, 3431
Coller, B. A. W., 943
Compostizo, A., 1839
Conti, G., 2547
Contreras Viguria, E., 2811
Cooney, R. P., 597, 3525
Copperthwaite, R. G., 1007
Cortés, J., 1351, 2473
Corti, H. R., 921
Costas, M., 2977
Covington, A. K., 1209, 3042
Craston, D. H., 1033
Craven, J. R., 1865
Crespo Colín, A., 1839
Crilly, J. F., 439
Crow, D. R., 3415
Crowther, N. J., 2791
Crudden, J., 2195, 2207
Dalas, E., 2897
Danil de Namor, A. F., 349, 2811, 3275
Das, M. N., 1973
Dawber, J. G., 119, 3097, 3407
de Haas, M. P., 2933
De Schrijver, F. C., 281
Dean, C. E., 89
Dearden, S. J., 1627
Del Vecchio, P., 2089
Delaney, G. M., 2195, 2207
Delannay, F., 2423
Delaval, Y., 365
Delmau, J., 3053
Delmon, B., 2423
Demertzis, M., 3647
Dharmalingam, P., 359
Días Peña, M., 1839
Dickel, G., 3289, 3293
Dobbin, C. J., 3625
Domen, K., 2269
Doménech, J., 1781
Dore, J. C., 2411
Duatti, A., 1429
Duce, P. P., 1471, 3501
Duplâtre, G., 2825

Eagland, D., 2008, 2791
Eastland, G. W., 2729, 2833
Ebeid, E-Z. M., 909
Eden, J., 2945
Edmonds, R. N., 2515
Edwards, P. P., 2515
Egawa, C., 3197
Egdell, R. G., 2003
Eid, A. E., 1643
Ekechukwu, A. D., 1965
El-Daly, S. A., 909
Elbing, The Late E., 943
Eley, D. D., 3475
Elia, V., 2089
Elworthy, P. H., 1903
Espenscheid, M. W., 1051
Espinosa-Jiménez, M., 329
Evans, D. F., 1829
Everett, D. H., 2589, 2605, 2915
Evmiridis, N. P., 3647
Ewen, R. J., 1127
Farnia, G., 1885
Farr Jr, A. C., 3125
Farrell, F. J., 3587
Feakins, D., 2195, 2207, 563
Fegan, S. G., 785, 801
Fernandez-Prini, R., 921
Fernandez-Valverde, S. M., 2825
Findenegg, G. H., 2001, 2691
Fink, P., 1879
Fisher, D. T., 119
Flanagan, T. B., 2175, 2589
Fletcher, A. J. P., 2605
Fletcher, P. D. I., 2311, 2651
Flory, P. J., 3367, 3381
Folman, M., 2025
Förster, H., 3401
Foulds, N. C., 1259
Fraser, I. M., 607, 2747
Freiser, H., 1217
Freund, P. L., 2277
Fricke, R., 263, 273, 3479, 3491
Fukuda, H., 1561
Funabiki, T., 35, 707, 1771
Fyles, T. M., 617
Gaboriaud, R., 2301
Gabrys, B., 1923, 1929
Ganghi, N. S., 2367
Garbassi, F., 2043
Garbowski, E., 1893, 3667
Garden, D., 3113
Garrido, J. A., 1781
Gellan, A., 953
Geoffroy, M., 521
Gervasini, A., 1795
Ghatak-Roy, A. F., 1051
Ghoneim, M. M., 909
Ghousseini, L., 349, 3275
Gilbert, R. G., 1979, 2247
Gilhooley, K., 431
Göbölös, S., 2423
Gómez-Estévez, J. L., 2167
González-Caballero, F., 329
González-Elipe, A. R., 739
González-Fernández, C. F., 329
Gopalakrishnan, R., 2635
Gormally, J., 157, 2497
Gorton, L., 1245
Gosal, N., 1471
Green, M. J., 1237
Green, N. J. B., 2673
Green, S. I. E., 3407
Grieser, F., 1813, 1829
Gritzner, G., 1955
Grzybkowski, W., 1381, 1703, 1745
Guardado, P., 1471
Haddad-Fahed, O., 2301
Haggett, B. G. D., 1033
Haidar, A. R., 3535, 3553
Haines, G. A. J., 2817
Hakin, A. W., 1471, 2989, 3681
Hall, D., 2111
Halle, B., 401, 415
Hamada, K., 3141
Hansén, O., 77
Harbour, J. R., 3625
Harriman, A., 3215
Harris, R. K., 2817
Harrison, M. R., 2515
Havredaki, V. I., 2531
Heatley, F., 255
Heberger, K., 2621
Hedges, W. M., 179
Hegde, M. S., 1657
Hellring, S. D., 1032
Hemfrey, J. P., 1589
Hersey, A., 1271
Hewitt, E. A., 869
Hey, M. J., 1805, 2817
Heyrovský, M., 585
Hidaka, H., 2615
Higgins, J. S., 1923, 1929, 2004, 3047
Higson, S., 157
Hill, C. A. S., 1127
Hill, H. A. O., 1237
Hill, T., 349
Hinman, A. S., 3525
Hitchman, M. L., 1223
Hobert, H., 1527, 2505, 3391
Hobson, D. B., 869
Holt, D., 3717
Homer, J., 533
Honeybourne, C. L., 1127
Honeyman, M. R., 89
Hooper, A., 1117
Hoppach, D., 3053
Hou, X-H., 1637
Houghton, J. D., 1127
Howe, A. M., 2411
Howe, R. F., 2887
Hronec, M., 1405
Hsu, W. P., 851
Huang, W-S., 2385
Hubbard, C. D., 1471
Hucknall, D. J., 3587
Hummel, A., 2933, 2945
Humphrey, B. D., 2385
Humphreys, F. J., 1020, 2006
Hunt, D. J., 189
Hunter, W. H., 2863, 2929
Hussian, S. M., 2221
Hutchings, G. J., 1007
Ige, J., 2011
Iijima, T., 3141
Iizuka, T., 1681, 61
Ikeda, H., 61
Ikeda, O., 1561
Indaratna, K., 2755, 2763
Indelli, A., 1429
Inomata, S., 1733
Inoue, M., 2175
Inoue, T., 1681
Ishii, T., 2615
Ishikawa, T., 2401
Issa, R. M., 909
Iwamoto, M., 1713
Jackson, G., 3461
Jackson, S. D., 189, 431, 2719
Jaeger, N., 205
Jaeger, N. I., 3315
Japaridze, J. I., 248.
Japaridze, S. S., 2481
Jayasuriya, D. S., 457, 473
Jensen, M., 1351
Jerschkewitz, H-G., 3479, 3491
Johns, A. I., 2235
Johnson, D. C., 1081
Johnson, J., 1081
Johnston, P., 1007
Joly, J-P., 3601
Jones, W., 545, 3081
Jonscher, A. K., 3535, 3553
Jonson, B., 767
Jose, C. I., 663, 681, 691
Kadhum, A. A. H., 2521
Kakuta, N., 1553
Kamat, P. V., 1031
Kaminade, T., 707
Kaneko, M., 3515
Kaneko, M. J., 1637
Kaner, R. B., 2323
Karaiskakis, G., 2897
Katime, I., 1321, 1333
Katsanos, N. A., 2897
Kavetskaya, O. I., 319
Kawaguchi, T., 1441
Kawai, S., 527
Kawai, T., 527
Kazusaka, A., 1553
Kelly, H. C., 1271
Kelly, K. P., 3025
Kelly, R. G., 1195
Kemball, C., 3044, 3113, 3125
Kevan, L., 213
Khan, S. U. M., 2911
Khoo, K. H., 1
Kido, K., 2269
Kinoshita, N., 2269

Kira, A., 3515
Kishimoto, S., 2175
Kiss, I., 3003
Kjellander, R., 2735
Kleine, A., 205
Klepping, A. H., 3475
Klinowski, J., 569, 1449, 2851, 3569
Kodejš, Z., 1853
Komatsu, T., 1713
Komiyama, M., 1713
Kondo, S., 2401
Kondo, Y., 2141
Koreeda, A., 527
Koresh, J. E., 2057
Köster, F., 2691
Kowalak, S., 2151
Kraehenbuehl, F., 3439
Kremer, M. L., 2133
Krishnasamy, V., 2665
Kuji, T., 2589
Kurotaki, K., 2843
Kusabayashi, S., 2141
Kuzuya, M., 1441
Kydd, R. A., 3525
Lamotte, J., 3019
Lancz, M., 883
Lang, J., 109
Langevin, D., 2001
Larkins, F. P., 1721
Larsson, R., 767
Laurie, O., 3149
Lavalley, J-C., 3019
Lawless, T. A., 1031, 2951
Lawrence, K. G., 563, 2195, 2207
Lawrence, M. J., 1903
Leaist, D. G., 247
Lelièvre, J., 2301
Leng, C. A., 3461
Léonard, J., 899
Leyendekkers, J. V., 1663
Lilley, T. H., 2965
Lim, T.-K., 69
Lin, J-C., 2645
Lincoln, S. F., 1999, 2123, 2333
Llars, S., 767
Llinares, A., 521
Llorente, M. L., 3307
Lockhart, J. C., 1161
Loewenschuss, A., 993, 2873
Logan, S. R., 161
Lomen, C. E., 1265
Lorenzelli, V., 3019
Lowe, B. M., 785, 801
Lowe, C. R., 1259
Łubkowski, J., 3069
Lukács, J., 2621
Lundin, S. T., 767
Lycourghiotis, A., 3697
MacCallum, J. R., 607, 2747
MacDiarmid, A. G., 2323, 2385
Mactaggart, J. W., 1805
Mahnke, R., 1413
Malliaris, A., 109
Mandal, P. C., 2103
Manes, M., 243
Marabini, A. M., 2043
Maran, F., 1885
Marchal, J-P., 2185
Marcus, Y., 233, 993, 2873, 3255
Marczewski, M., 1687
Maroto, A. J. G., 2345
Marshall, W. L., 2283
Martin, C. R., 1051
Maruthamuthu, P., 359
Marx, U., 2505
Mastikhin, V. M., 1879
Matheson, R. A., 2755, 2763
Mathieu, M-V., 1893, 3667
Matijević, E., 2801
Matsuda, T., 1357
Mbaneme, P. C., 3357
McCarthy, S., 943
McIntosh, A. R., 3625
McQuillan, A. J., 2755, 2763
Mead, J., 125, 1031, 1755
Meiler, W., 3053
Melchor, A., 1893, 3667
Meyerstein, D., 3431
Miale, J. N., 1032
Miasik, J. J., 1117
Michael, A., 3053
Michel, D., 3053
Midgley, D., 1187
Milburn, P. J., 2965
Miles, R. J., 2929
Minami, Z., 1357
Mishima, S., 1307
Mishra, S. P., 521
Miura, H., 1357
Miyake, Y., 1515
Miyamoto, A., 13
Mobbs, R. H., 1865
Mol, J. C., 1945, 2707
Möller, K., 3315
Mollett, C. C., 1589
Mollica, V., 2547
Molyneux, P., 291, 635, 3287
Moore III, R. B., 1051
Morando, P. J., 2345
Morazzoni, F., 1795
Morehouse, K., 3215
Morgan, H., 143
Mori, K., 13
Morris, J. J., 3501
Movaghar, B., 3717
Moyes, R. B., 189, 2719
Mulla, S. T., 681, 691
Murakami, Y., 13
Murata, M., 2615
Muscetta, M., 2089
Nagano, S., 1357
Naito, S., 3197
Najbar, M., 1673
Nakajima, T., 1307
Nakamatsu, H., 527
Nakanishi, M., 1441
Nakano, A., 2141
Napper, D. H., 1979, 2247
Narayana, M., 213
Navard, P., 3367, 3381
Neta, P., 3215
Neto, M. M. P. M., 1071
Neuburger, G. G., 1081
Nevell, T. G., 3587
Nex, C. M. M., 3233
Nikitas, P., 977
Nitta, S., 2401
Nock, A., 2817
Noyes, R. M., 2999
Nyasulu, F. W. M., 1223
Oakes, J., 2079, 3149
Oesch, U., 1179
Ogino, Y., 1713
Öhlmann, G., 263, 273, 3479, 3491
Öhman, L-O., 3635
Okazaki, S., 61
Okubo, T., 3163, 3175, 3185
Okuda, T., 1441
Okuhara, T., 3657
Oldfield, M. J., 2673
Oldham, K. B., 1099
Onai, T., 2615
Onishi, T., 2269
Ooe, M., 35
Opałło, M., 339
Orchard, S. W., 1007
Oref, I., 1289
O'Reilly, P. J., 2195, 2207
Ortiz, A., 495
Owen, A. E., 1195
Parbhoo, B., 1789
Park, C-N., 2589
Parry, D. E., 3051
Parsegian, V. A., 2801
Parsons, B. J., 1575
Patterson, D., 2977
Pease, W. R., 747, 759
Peeters, G., 963
Peeters, S., 963
Penboss, I. A., 2247
Penner, R. M., 1051
Perry, M. C., 533
Pethig, R., 143
Petropoulos, J. H., 2459, 2531
Pettersson, A., 2435
Pfeifer, H., 3053
Pham, H. V., 1179
Phillips, G. O., 1575
Piculell, L., 387, 401, 415
Piekarska, A., 513
Piekarski, H., 513
Pilarczyk, M., 1703, 1745
Pilling, M. J., 2673
Pimblott, S. M., 2673
Pinna, F., 1795
Plath, P. J., 3315
Pletcher, D., 179
Poinsignon, C., 3447

Polta, J. A., 1081
Polta, T. Z., 1081
Popovic, Z. D., 3625
Porter, G., 3215
Porter, S. J., 2323
Pouchlý, J., 1605
Primet, M., 1893, 3667
Puchalska, D., 1381
Puttock, S. J., 2773, 3013, 3033
Quellet, C., 3439
Quintana, C., 3307
Quintana, J. R., 1333
Radulovic, S., 1471
Rajaram, R. R., 1985
Ramakrishna Rao, D. N., 2367
Ramaraj, R., 3515
Ramdas, S., 545
Ramsay, J. D. F., 3447
Rao, D. N. R., 2833
Rashid, S., 2235
Rebenstorf, B., 767
Richards, W. G., 3047
Richardson, P. J., 869
Richoux, M-C., 3215
Rideout, J., 167
Rigby, S., 431
Rizkallah, P. J., 1589
Roberts, M. W., 723
Robinson, B. H., 1271, 2311, 2411
Robinson, P. J., 869
Rochester, C. H., 953, 1805, 1911, 2569, 2773, 3013, 3033
Rockliffe, J. W., 3149
Rodríguez, R. M., 1781
Rooney, J. J., 2005
Rosenholm, J. B., 77, 2435
Rossi, P. F., 3019
Rouw, A. C., 53
Rowlinson, J. S., 3461
Rubio, R. G., 1839
Rudham, R., 2817
Ruiz-Hitzky, E., 1597
Russell, D., 2729
Ryder, P. L., 205
Sacchetto, G. A., 1853
Saez, C., 1839
Saleh, J. M., 2221
Salmon, G. A., 161, 2521
Sanchez, F., 1471
Sánchez, M., 3307
Sandonà, G., 1885
Sangster, D. F., 1979
Saraby-Reintjes, A., 3343
Saris, P., 2435
Sárkány, A., 103
Saur, O., 3019
Saville, G., 3041, 3046
Sawada, K., 1733
Scarano, D., 3611
Schärpf, O., 1923, 1929
Schiller, R. L., 2123
Schlosserová, J., 1405
Schmelzer, J., 1413, 1421
Schmitt, K. D., 1032
Schmitter, B., 3439
Schmuck, I., 3391
Schoonheydt, R. A., 281
Schulz-Ekloff, G., 205
Schulz, R. A., 3501
Scott, J. M. W., 2989
Scott, R. P., 1389
Seebode, J., 3401
Segal, M. G., 3245
Segall, R. L., 747, 759
Seloudoux, R., 365
Senō, M., 2065
Sharma, S., 2497
Shibata, Y., 1357
Shigeto, M., 1515
Shindo, H., 45
Shubin, A. A., 1879
Sidahmed, I. M., 2577
Siiman, O., 851
Simmons, R. F., 1965
Simon, W., 1179
Sircar, S., 831, 843
Sjöberg, S., 3635
Smallridge, M. J., 1589
Smart, R. St C., 747, 759
Smith, D. G., 2569
Smith, E. G., 3149
Smith, I., 869
Smith, J. A. S., 2004
Snelling, C. M., 3709
Snowdon, S., 943
Soffer, A., 2057, 2627
Sokoll, R., 1527, 2505, 3391
Solymosi, F., 883
Somsen, G., 53, 933
Sorek, Y., 3431
Soria, J., 739
Soria, V., 2781
Soriyan, O., 2011
Spiess, B., 1935
Spiro, M., 2277, 3048
Spotswood, T. M., 1999
Stenius, P., 2735
Stephens, A., 2729
Stoeckli, H. F., 3439
Strachan, A. N., 3709
Strachan, R. M., 3709
Strazielle, C., 1321
Strukul, G., 1795
Strumolo, D., 1795
Sugiyama, K., 1357
Suppan, P., 509
Sutherland, I. O., 1145
Suzuki, T., 1733
Svensson, I. L., 3635
Swallow, A. J., 1575
Symanski, J. S., 1105
Symons, M. C. R., 167, 2367, 2833, 2729
Szentirmay, M. N., 1051
Tabony, J., 2311
Tada, T., 3561
Tadros, Th. F., 3045
Take, S., 3141
Tamaru, K., 3197
Tamura, H., 1561
Tamura, K., 1619
Tanaka, K., 3657
Tanaka, T., 35
Tanaka, Y., 2065
Tang, A. P-C., 1081
Taniewska-Osińska, S., 513, 1299
Tardajos, G., 2977
Tatam, R. P., 439
Tawarah, K., 2111
Taylor, P. J., 3501
Tear, S. P., 1022
Tejero, R., 2781
Tennakoon, B., 3081
Tennakoon, D. T. B., 545
Teramoto, M., 1515
Thijs, A., 963
Thomas, J. D. R., 1135
Thomas, J. M., 545, 2851, 3081
Thomson, A. J., 2009
Tiddy, G. J. T., 3043
Tilak, D., 3081
Tobias, H., 2627
Tofield, B. C., 1117
Toprakcioglu, C., 2411
Townsend, R. P., 1019
Trasatti, S., 2481
Tunuli, M. S., 2911
Turner, J. C. R., 3052
Turner, P. S., 747, 759
Tyler, J. W., 1367
van de Ven, T. G. M., 457, 473
Van Herk, A. M., 3331
van Lith, D., 2945, 2933
Vansant, E. F., 963
Vasáros, L., 3003
Vekavakayanondha, S., 291, 635, 3287
Venkatasubramanian, L., 359
Verhaert, I., 963
Veselý, V., 1405
Vidóczy, T., 2621
Vijlder, M. De, 2377
Vink, H., 2353
Viswanathan, B., 2635
Vivo, A., 3307
Volkov, A. I., 815
Volpe, P. L. O., 2863, 2929
Vonk, D., 1945
Vordonis, L., 3697
Waghorne, W. E., 563, 2195, 2207
Walker, R. W., 89
Wallwork, S. C., 1589
Walton, A. J., 1023
Wang, Z-C., 375
Ward, R. J., 2915
Warhurst, P. R., 119
Warman, J. M., 2933, 2945
Warr, G. G., 1813, 1829
Watson, J. T. R., 2235
Watts, P., 1389

Weale, K. E., 1020, 2002
Weiss, E., 2025
Wells, C. F., 1643, 2577
Wells, P. B., 189, 2719
Whalley, P. D., 1209
Whan, D. A., 3113
Whyman, R., 189, 2719
Wiens, B., 247
Williams, G., 3049, 3050
Williams, R. A., 3097
Williams, W. J., 3245
Wilson, G. S., 1265
Wilson, I. R., 943
Wójcik, D., 1381
Woźnicka, J., 1299
Wren, B. W., 167
Wright, K. M., 451
Wright, P. G., 2557, 2565
Wu, E. L., 1032
Wu, Q., 2423
Wuthier, U., 1179
Wyn-Jones, E., 2111
Wysocki, S., 715
Xiaoding, X., 1945, 2707
Yamada, A., 1637
Yamashita, H., 1771, 707
Yamazaki, A., 1553
Yatsimirsky, A. K., 319
Yeates, S. G., 1865
Yeo, I-H., 1081
Yoshida, N., 2175
Yoshida, S., 35, 707, 1771
Yoshikawa, M., 707, 1771
You-Sing, Y., 2887
Zakharieva-Pencheva, O., 3401
Zana, R., 109
Zanderighi, L., 1795
Zecchina, A., 3611
Zünd, R., 1179